

AN ABSTRACT OF THE THESIS OF

Samuel M. Mawutor for the degree of Master of Science in Forest Ecosystems and Society presented on September 11, 2020.

Title: Forest Decentralization in Ghana: Examining Empowerment of Local Institutions.

Abstract approved:

Reem F. Hajjar

Decentralizing resource control for community-based natural resource management (CBNRM) is a widely promoted scheme for natural resource governance worldwide. Researchers and policymakers have suggested that this approach has the potential to achieve positive social outcomes and succeed where centralized resource conservation has been inadequate. In reality, the powers transferred are not always as theorized, and the outcomes of these schemes are a mix of success and failures on social and ecological performance. In this exploratory study, I sought to examine the powers transferred to Community Resource Management Areas (CREMAs) in Ghana and the transferred powers' outcomes. I used a qualitative research design and interviewed research participants in Ghana at the National and District levels and three selected CREMAs from the west of the High Forest Zone in Ghana. I also approached this work from a critical research paradigm. The results show that CREMAs have and exercise extensive powers to enforce restrictions on local use of forest resources, but have limited decision-making, law-making, or adjudication powers over resources. CREMAs consequently appear to be a

vehicle for achieving the Forestry Commission's conservation objectives rather than pursue the socio-political opportunities for forest communities through resource management. The results also show that CREMAs impact on communities is weak. There is no focus on enhancing forest communities' political awareness to exercise choice and self-determination over their resource rights. There is the need for a political approach to CREMAs, which fully considers their marginalized position in resource decision making, to give them real local control over resources and support. Local CREMA communities need far greater rights compared to the claims of what is currently given. External actors, particularly NGOs, need to support communities to realize their resource rights and utilize their natural resources to create wealth locally. These findings also show the need for greater coherence between decentralizing forest and the political decentralization process. This thesis also provides useful feedback for the CREMA reform process and makes theoretical and practical contributions to CBNRM and CREMA literature.

©Copyright by Samuel M. Mawutor
September 11, 2020
All Rights Reserved

Forest Decentralization in Ghana: Examining Empowerment of Local
Institutions

by
Samuel M. Mawutor

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Master of Science

Presented September 11, 2020
Commencement June 2021

Master of Science thesis of Samuel M. Mawutor presented on September 11, 2020

APPROVED:

Major Professor, representing Forest Ecosystems and Society

Head of the Department of Forest Ecosystems and Society

Dean of the Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Samuel M. Mawutor, Author

ACKNOWLEDGEMENTS

It has been an exciting journey these past two years to get to this conclusion point. I thank God for how far He has brought me. I also thank you, Dr. Reem Hajjar. It has been a great pleasure working with you these past two years. Your guidance, support, friendship, and kindness kept me going even in challenging times. You are the coolest advisor there is. Thank you, committee members, and colleagues in the FoLIAGe lab for your support, feedback, and guidance. I could not have been in better company. To my friends and family here in Corvallis: thank you for taking me in and making Corvallis welcoming to international students, particularly in these difficult times.

To Johnny Sundstrom, Hannah Gosnell, and all associated with the Shiloh Sundstrom Memorial Scholarship: thank you for the inspiration and opportunity to be a Shiloh Scholar.

I am also grateful to all my research participants. Our conversations were very rich, exciting, and inspiring. It gives me great joy to continue working with you to make natural resources work for local people. To my research assistant, Raymond Ennin, thank you for helping out in the field, the sacrifices, and the vital reflections you provided during our debriefings. To my team of transcribers: thank you for your diligence. To Dzifa Kumaga, Gertrude Lamptey, Mirriam Adowa Poku, Kwame Ayim, and the many others who made my two-year journey enjoyable, thanks for the company.

Finally, to my family back home in Ghana: My mom, dad, siblings, and bugging nephews and nieces: thank you for always having my back. Thank you for the love. I would not have come this far without your prayers, push, and motivation.

TABLE OF CONTENTS

	<u>Page</u>
CHAPTER ONE: GENERAL INTRODUCTION	1
INTRODUCTION	1
FOREST DECENTRALIZATION AND COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT.....	1
COMMUNITY RESOURCE MANAGEMENT AREAS (CREMAS) IN GHANA.....	3
OVERALL RESEARCH QUESTION	5
METHODOLOGY OVERVIEW	5
ORGANIZATION OF THE CHAPTERS	8
CHAPTER TWO: WHAT POWERS? COMMUNITY RESOURCE MANAGEMENT AREAS (CREMAS) AND FOREST DECENTRALIZATION IN GHANA	10
INTRODUCTION AND BACKGROUND.....	10
<i>DECENTRALIZATION AND THE MANAGEMENT OF FOREST AND WILDLIFE RESOURCES IN GHANA</i>	12
<i>RESOURCE GOVERNANCE HISTORY IN GHANA</i>	12
<i>CONCEPTUALIZING FOREST DECENTRALIZATION</i>	14
METHODOLOGY	16
<i>RESEARCH APPROACH AND METHODS</i>	16
<i>CASE SELECTION</i>	17
<i>SAMPLING</i>	17
<i>DATA COLLECTION</i>	18
<i>ANALYSIS</i>	19
<i>VALIDITY AND RELIABILITY</i>	19
RESULTS	22
<i>POWER TO MAKE DECISIONS</i>	22
<i>POWER TO MAKE RULES</i>	26
<i>POWER TO ENSURE COMPLIANCE</i>	28
<i>POWER OF ADJUDICATION</i>	34
DISCUSSION: REFLECTIONS ON CREMAS AS A FORM OF FOREST DECENTRALIZATION.....	35
<i>DECENTRALIZING POWERS VERSUS PASSING RESPONSIBILITIES</i>	36
<i>THE DILEMMA OF STRUCTURAL PARALLELISM IN CREMAS</i>	37
<i>THE PARADOX OF FOREST DECENTRALIZATION</i>	38
CONCLUSIONS.....	39
CHAPTER 3: EXAMINING CREMA OUTCOMES: COMMUNITY EMPOWERMENT.....	42
INTRODUCTION.....	42
BACKGROUND AND CONTEXT	43
<i>FOREST MANAGEMENT IN GHANA</i>	43
<i>ASSESSING CBNRM</i>	44
<i>DEFINING A COMMUNITY</i>	45
<i>'POWER' IN EMPOWERMENT</i>	45

<i>EMPOWERMENT AND DISEMPOWERMENT</i>	46
<i>COMMUNITY EMPOWERMENT FRAMEWORK</i>	47
<i>METHODOLOGY</i>	49
<i>RESEARCH APPROACH AND METHODS</i>	49
<i>CASE SELECTION</i>	49
<i>PARTICIPANT SELECTION</i>	50
<i>DATA COLLECTION</i>	51
<i>ANALYSIS</i>	51
<i>VALIDITY AND RELIABILITY</i>	52
<i>RESULTS</i>	52
<i>SIGNS OF POLITICAL EMPOWERMENT</i>	53
<i>SIGNS OF POLITICAL DISEMPOWERMENT</i>	54
<i>SIGNS OF SOCIAL EMPOWERMENT</i>	56
<i>SIGNS OF SOCIAL DISEMPOWERMENT</i>	58
<i>SIGNS OF ECONOMIC EMPOWERMENT</i>	58
<i>SIGNS OF ECONOMIC DISEMPOWERMENT</i>	60
<i>SIGNS OF PSYCHOLOGICAL EMPOWERMENT</i>	61
<i>PSYCHOLOGICAL DISEMPOWERMENT</i>	62
<i>WHO WAS EMPOWERED?</i>	62
<i>DISCUSSION</i>	63
<i>EMPOWERMENT FOR CONSERVATION</i>	64
<i>ROLE OF EXTERNAL ACTORS</i>	67
<i>CONCLUSIONS</i>	70
CHAPTER 4: OVERALL CONCLUSIONS	72
LIMITATIONS	73
IMPLICATIONS OF THE STUDY	76
AREAS FOR FURTHER STUDY	78
REFERENCES	80

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure 1.1 Map of Study locations.....	8
Figure 2.1 A model of CREMA structure.....	12

LIST OF TABLES

<u>Table</u>	<u>Page</u>
Table 1.1 Table of case studies and research participants	6
Table 2.1 Summary of types of powers devolved to CREMAs in laws and those experienced by participants.....	21

LIST OF APPENDICES

<u>Appendix</u>	<u>Page</u>
A. Research Participants.....	90
B. Interview Guide for Focus Groups.....	91
C. Interview Guide for District level Participants	93
D. Interview Guide for National Level Participants	94
E. Consent Statement: Focus Groups	96
F. Verbal Consent Statement: Individual Interviews	97
G. Chapter 2 Codebook	99
H. Chapter 3 Codebook	100

CHAPTER ONE: GENERAL INTRODUCTION

Introduction

This introductory chapter provides a general context for this thesis. It briefly traces the history of community-based natural resource management (CBNRM), its underlying principles, and how it emerged in the case country, Ghana. It also describes the characteristics of the CBNRM approach in Ghana, why it is an interesting subject for research, and the research question driving this study. Lastly, it briefly outlines a general overview of the research methodology used and the organization of the chapters.

Forest Decentralization and Community-Based Natural Resource Management

Decentralization is a widely practiced and accepted approach to governance, and most countries in the world have undertaken one form of decentralization or another. Most transitional countries from the 1970s adopted this form of governance to address development problems such as lack of local participation or beneficiary participation in governance, weak national level institutions and coordination of development planning (Parker, 2009). To date, it is still considered as a useful approach to meeting national development goals and priorities (Guha & Chakrabarti, 2019). Decentralization usually involves the transfer of power, resources, responsibility, or functions from a central government to autonomous or semi-autonomous local-level units. It is intended to strengthen local institutions and to bring local populations into decision-making processes (Ribot, 2002a). Decentralization in the forest sector takes the form of a transfer of authority over natural resources decision-making and its accruing benefits from central governments to local people and their institutions (Shackleton et al. 2002). The concept of forest decentralization is also expressed as community-based natural resource management CBNRM, community forests (CFs), community-based forest management (CBM), and community-based conservation (CBC) among others.

The shift to local community management reemerged as an alternative to coercive conservation. Coercive conservation was increasingly questioned by social science

researchers, development practitioners, and conservationists owing to negative outcomes, particularly the eviction of people who traditionally depended on these resources. The creation and management of the Yellowstone National Park made fortress conservation the model for protected area management around the world (Benjaminsen & Svarstad 2010). Coercive forest conservation for many years however restricted the use and access to forests, except for tourism and education. It was actively championed over the years by conservationists and some environmental non-governmental organizations (NGOs) and continues in modern times to expropriate lands from rural dwellers in Africa, Asia, and other parts of the world (Brockington & Igoe 2006). Such evictions disempowered local people, denied them use of resources, and caused other social and material harms. Also, perceptions that local resource use resulted in the collapse of the commons provided strong justification for fortress conservation and centralized resource management (Moore, 1985).

The movement towards CBNRM gained greater traction in the 1980s and 1990s. The social justice grassroots movements of the 1980s pressed for local solutions to environmental problems rather than externally imposed conservation (Dressler et al. 2010). Subsequent arguments from common property theorists exposed the weaknesses of the tragedy of the commons thesis and provided evidence of how local collective action led to successful management and recovery of some commons (Ostrom, 1999). These arguments strengthened calls for decentralized natural resource management and community-based resource management, resulting in the experimentation of this approach in various parts of the world. In the late 1990s, CBNRM pushed towards addressing poverty and development needs of local people when it became obvious that conventional conservation was not having this impact. (Roe, 2008). One of the earliest forms of CBNRM areas in Africa is the Communal Areas Management Programme for Indigenous Resources in Zimbabwe. It started in 1975 to devolve control and ownership over wildlife to Rural Development Councils to generate income for community development (Murombedzi, 1999).

Over the years of implementation of CBNRM, we can identify some important assumptions of this resource management approach. The first is that local people have the capacity to set collective action rules to manage resources for their interests (Ostrom,

1999). When local people can set the rules on access and use, they have the ability to organize resource use for their collective benefit. Secondly, when local people are incentivized to sustainably manage resources, they can generate a wide range of social, environmental, and economic benefits (Murphree, 2009). These incentives include granting them exclusive control over good productive resources. Also, CBNRM assumes that when governments delegate resource control to local people, they can be supported to manage resources sustainably. Communities must be given legislative, executive, and judicial powers (Agrawal & Ribot 1999). Lastly, CBNRM can also empower local communities to demonstrate confidence, assert their rights, and change power relationships with the State and other actors (Bene & Neiland, 2004; Murphree, 2009). In this sense, CBNRM has the potential to transform power relations between communities and the State. CBNRM areas are, however, set up for various reasons, hence not all these assumptions may be the core objective for conservation (Bene & Neiland, 2004).

Community Resource Management Areas (CREMAs) in Ghana.

Community Resource Management Areas (CREMAs) is the main CBNRM approach in Ghana and it started in the 2000s to incentivize local participation in sustainable wildlife management. The first CREMAs were set up around national parks and protected areas to respond to the challenges of forest conservation of these national forest estates and to win local support for the protection of these parks. Its unique approach is in its attempt at devolving management authority over wildlife resources to local people and community-based groups (Forestry Commission 2004a). CREMAs are initiated by the Wildlife Division of the Forestry Commission of Ghana and have mostly been established adjacent to protected areas and in other areas too. Non-state actors, particularly NGOs have also played an important role in the establishment of these CREMAs.

The process of establishment includes a series of awareness campaigns to persuade local communities to see the need for conservation and protection of their resources. The process also involves developing local institutions – rules and structures for the management of the area. CREMAs promise opportunities for improved livelihoods and incomes, opportunities to solve community problems, people empowerment to protect

resources, and freedom to integrate natural resource management into local livelihood strategies (Forestry Commission, 2004a). Between 2000 and 2019, thirty-two (32) of such CREMAs have been established across the country with the highest concentration of them in the western part of the High Forest Zone.

There are a number of distinctive features of CREMAs. CREMAs have bylaws passed by their respective District Assemblies and that is their basis of legal existence. The bylaw delineates the boundaries of the CREMA, the powers granted to the CREMA, the offenses and sanctions for violation of the bylaws, and the rights of members of the CREMA. CREMAs also have constitutions they make for themselves. In it, they define the rules for managing the conservation area, the roles of leadership and members, and the sanctions for violating the CREMA rules. CREMAs also have a governance structure that is defined by members in their constitution. For the administration of the CREMA, there is the Community Resource Management Committee (CRMC) made up of elected members in a participating community and headed by a chairman. The CRMC executes community-level functions of the CREMA. Elected members of the CRMC from the participating communities elect members of the CREMA Executive Committee (CEC) which is headed by the CEC chairman. The CEC consists of not more than 15 CRMC representatives. Other actors such as the district assembly, NGOs, and traditional authorities may be invited to serve on the CEC as non-voting members. Lastly, CREMAs after going through this formation process receive a certificate of devolution of management authority from the Minister responsible for forests and from the Wildlife Division of the Forestry Commission. This certificate indicates they are a fully constituted CREMA with developed power and autonomy to manage their area.

CREMAs have been noted for their potential for positive conservation impacts. They are a major strategy for achieving Ghana's targets under the Reducing Emission from Deforestation and Forest Degradation plus (REDD+) strategy (Asare, Kyei, & Mason, 2013; Forestry Commission, 2016). CREMAs also allow for local participation in resource management although its interactions with District Assemblies and other external actors are weak (Murray, Agyare, Dearden, & Rollins, 2018). They have also improved the planting and registration of trees in agroforestry landscapes (Baruah et al., 2016). However, the

challenges of CREMAs are numerous including elite capture and elite formation, governance weaknesses, lack of integration into markets, and inadequacy in meeting desired outcomes of communities (Agyare et al. 2015; Baruah 2017; Baruah et al. 2016). CREMA practitioners including civil society, CREMA community representatives, private companies and media, at the end of a national forum on CREMA in 2019, advanced in their communiqué that:

“CREMAs are currently the only workable option to ensure participation and transfer of responsibility and benefits to communities in achieving emissions reductions for REDD+.”

CREMAs, therefore, seem more desirable compared to other forms of community participation in local-level forest management. The forum also identified the absence of an assessment of CREMA outcomes as a knowledge gap that needed to be addressed to inform policy support measures for CREMAs. Additionally, there is a knowledge gap in assessing CREMAs and their outcomes with a political lens. Within this knowledge laid my motivation for this work. This work attempts to address this gap by providing an assessment of CREMAs, its functions, and outcomes.

Overall Research Question

This thesis is driven by the main research question: to what extent are CREMAs decentralizing power to empower local people? This research question is aimed at examining the nature of decentralization in CREMAs and the types of empowerment in CREMA communities. To get to the heart of the question, I pose two sub-questions to guide the research process:

1. To what extent are CREMAs decentralizing power?
2. To what extent are the devolved powers to CREMAs contributing to community empowerment?

Methodology Overview

I approached this work as a critical researcher, mindful of how social and political inequalities of local communities have shaped their relationship with state institutions and natural resources. I used qualitative research methods and collected evidence from selected cases to understand the nature of decentralization in CREMAs and their outcomes. I used a

multiple case study approach, focus group interviews, individual interviews, and content analysis of important CREMA documents, to answer the research questions. The details of the research approach to each of the questions and data analysis are outlined in the various chapters. The table below also provides the total number of research participants in this work. The case studies were chosen from the western part of the High Forest Zone due to its concentration in this area and the emphasis of national forest restoration policy in this area (figure 1.1). To ensure the cases that I selected sampled the diversity of CREMAs, I selected for cases that were new and old, located near restricted and accessed forest reserves, and those that were either active, dormant, or in revival. The cases are Amokwaw CREMA, Aowin CREMA, and Krokosua Hills CREMA.

Case	Year of est.	Total area (ha)	n of CRMCS	n of focus groups	Total n of participants	Status
Amokwaw	2003	2915	9	9	61	Dormant & revival
Aowin	2019	17,797	6	12	74	Vibrant
Krokosua Hills	2006	4580	11	13	73	Ongoing & revival
National & District participants					12	

Table 1.1 Table of case studies and research participants

Amokwaw CREMA

Amokwaw CREMA is the first CREMA established in 2003 and in the south of the High Forest Zone. It is on the fringes of the Ankasa Conservation Area consisting of the Nini Sushien National Park and the Ankasa Reserve. These two forest estates are the exclusive property of the State and managed by the Wildlife Division of the Forestry Commission for preservation, tourism, and education (Forestry Commission, 2000a). Like all protected areas, this area is strictly off limits to local communities and they have the presence of many forest rangers for its protection. Amokwaw CREMA consists of eight CRMCS. Most residents in the area are a mix of migrants and indigenes and are engaged in cocoa farming, oil palm farming, rubber or coconut farming. There are nine other fully established CREMAs around the Ankasa Conservation Area, most of which have become dormant and are being revived by the park managers.

Aowin CREMA

Aowin CREMA is one of five new CREMAs established in 2019 to serve as a corridor for wildlife movement in the High Forest Zone. The CREMA is in-between the Boin River Forest Reserve and the Yoyo Forest Reserve, both of which are managed by the Forest Services Division, hence local communities have access to the forest to collect forest products for domestic use. Like other forest reserves, the Forest Service Division's protection is less strict than protected areas because they are considered as the property of the local people, justifying local use rights. Communities in this area are mainly engaged in cocoa farming. This CREMA is made up of 26 communities organized into six CRMCs.

Krokosua Hills CREMA

Krokousa Hills CREMA was established in 2009. It is one of ten clusters of CREMAs in the Bia Conservation Area. It is located in between the Krokosua Hills Forest Reserve, with active logging operations in the south, and the well-protected Bia National Park to the North. Logging operations were ongoing in some of the CREMA communities. Unlike the Bia National Park, communities here also have user rights to access resources in the Krokosua Hills Forest Reserve. This Forest Reserve has been degraded by the encroachment of cocoa farmers. Since 2018, this CREMA has rebounded, and it is strongly collaborating with other CREMAs in the Bia Conservation Area to form a landscape governance system to reduce cocoa-driven deforestation. There are eleven CRMCs in this CREMA.

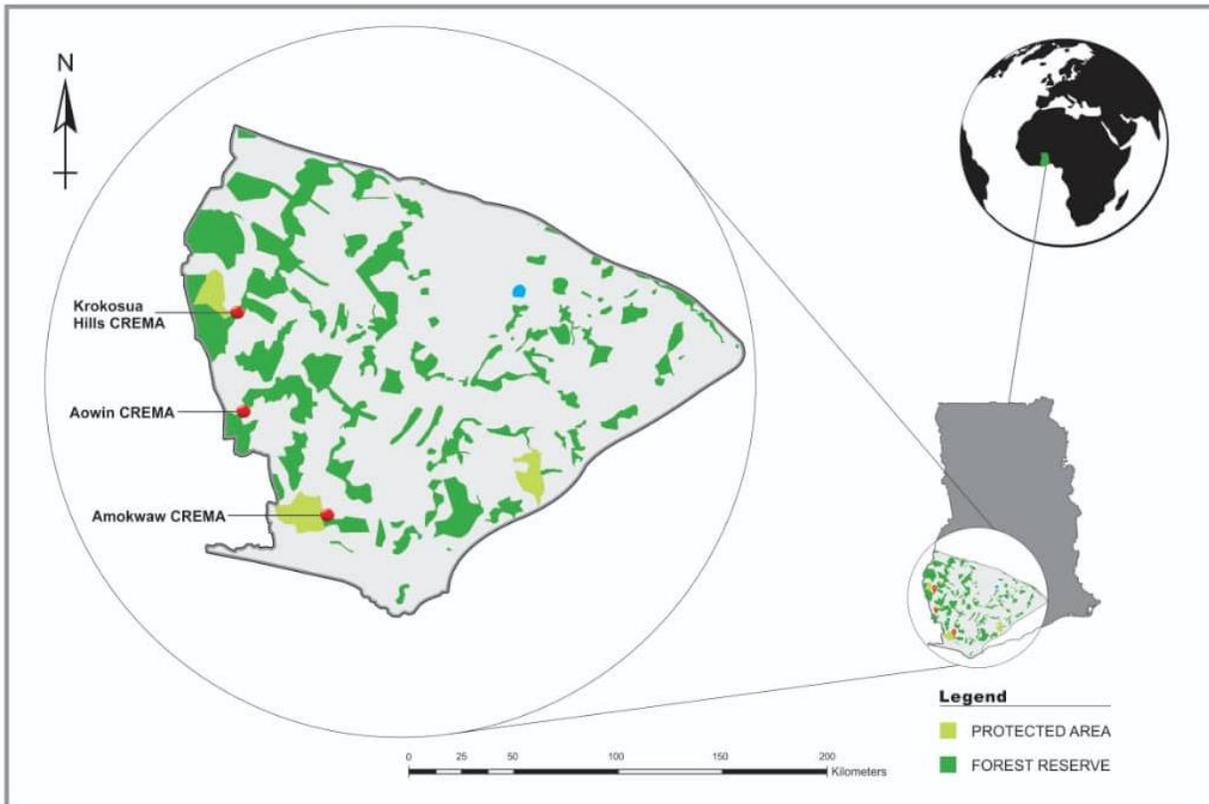


Figure 1.1 Map of study locations adapted from MLNR, (2012)

Organization of the Chapters

This thesis is organized into four main chapters. This first chapter presents a general overview of the work and introduces some key concepts which are further examined under the various chapters. The second chapter addresses the first research question and studies the nature of decentralization in CREMAs. This chapter uses the powers, actors and accountability theoretical framework (Agrawal & Ribot, 1999) to explore the types of powers transferred to CREMAs in contrast with local stakeholders' perspectives. This paper outlines four types of powers transferred and received by CREMAs and explains the rationale for which a kind of power is more pronounced. The third chapter addresses the second research question examining the outcomes of CREMAs on empowerment. The second paper uses the community empowerment framework (Scheyvens, 1999) to disaggregate the impact of CREMAs into four dimensions. The paper also examines the reasons for those outcomes and what the findings mean for CREMAs. The final chapter

concludes the thesis. It reflects on the key findings of this work, its implications for policy in Ghana, the limitations of the study, future areas of research, and recommendations for strengthening CREMAs.

CHAPTER TWO: What Powers? Community Resource Management Areas (CREMAs) and Forest Decentralization in Ghana

Introduction and Background

Community-based natural resources management (CBNRM) schemes are common around the world. Since the 1970s, this approach continues to gain popularity with 15% of the world's forest under community-based ownership or management regimes (Gilmour 2016; RRI, 2014). CBNRM refers to the use, management, and conservation of natural resources by local communities under varied ownership arrangements and collaborations with the State agencies (Arts & de Koning, 2017). It is built around a persuasive argument that local communities can, by themselves or with external support, develop and enforce collective action rules to sustain resources use and meet desirable environmental and social outcomes (Ostrom, 1999; Schlager & Ostrom, 1992). This approach to management runs contrary to the flawed but equally persuasive tragedy of the commons which justifies privatization or government enclosure of the commons (Hardin, 1968; Moore, 1985). Restrictive approaches are often associated with varied socio-economic impacts, including the physical displacement of local people, loss of access to economic resources, and displacement from places and symbols of culture value (Brockington & Igoe, 2006).

CBNRM schemes highlight the institutional capacity of organized community groups to sustainably manage and use resources to realize ecological and social outcomes (Larson & Soto, 2008; Ribot, 2002a). There is sufficient evidence that local people by themselves or after receiving delegated powers from the State have successfully developed community based-enterprises; integrated their isolated communities into markets; improved livelihoods; and also improved the protection of landscapes (Ostrom, 1999, 2000; Agrawal, 2007; Levine, 2016). Assessments of community resource management models, however, show different kinds of tradeoffs between ecological and social outcomes and successful or failed projects (Arts & de Koning 2017; Bene & Neiland, 2004; Duguma et al. 2018; Hajjar et al. 2016; Piabuo, Foundjem-Tita, & Minang 2018a, 2018b; Ribot, Agrawal, & Larson 2006). Unfortunately, CBNRM is often romanticized by social activists, some of whom ignore the many implementation challenges (Kumar, 1997, 2002).

Ghana is implementing Community Resource Management Areas (CREMAs). It is a variety of CBNRM to address forest and wildlife habitat loss, arrest wildlife decline, and keep protected areas from local community encroachment (Baruah 2017). Though not the only approach to improve community participation, the CREMA approach is the first to use “a significant devolution of management authority to a community-based organization” to address ecological problems (Forestry Commission 2004b; MLNR 2012). It continues to excite the interest of researchers and practitioners alike who see its potential to reduce carbon emissions from agricultural landscapes in Ghana, particularly cocoa landscapes (Forestry Commission, 2018, Asare, Kyei, & Mason, 2013; MLNR, 2012).

Existing research on CREMAs has focused on impacts on people and forest resources; the role of intermediaries; representation and governance structures within CREMAs; and relations with different levels of political institutions and hierarchy (Murphree, 2006; Agyare, Murray, Dearden & Richard Rollins, 2015; Baruah, 2015, 2017; Baker, Murray & Agyare, 2018; Bempah, Dakwa & Monney, 2019), but very few have examined the kinds of power CREMAs possess and how that translates into local control over resources. On the other hand, forest decentralization papers in Ghana have broadly examined timber administration; the role of different State institutions in forest administration; and different participatory approaches to community participation in forest management (Robinson & Sasu, 2013; Sasu 2005; Teye 2011; Yeboah-Assiamah, Muller, & Domfeh 2018). Yet none of them have examined CREMA as a model of decentralization. Therefore, there is a need to address this knowledge gap to set CREMA in the context of forest decentralization knowledge in Ghana.

In this paper, I seek to examine the extent to which CREMAs decentralize resource powers to local communities. To unpack this case, I first explain the context of forest decentralization in Ghana and its theoretical elements. I then examine the variations and discrepancies between the power of CREMAs as stated in their bylaws and CREMA constitutions and the perceived power stakeholders exercise. I deploy the actors, powers and accountability (Agrawal & Ribot, 1999) framework for examining decentralization to

and order and dispensed civil justice in their traditional courts (Awortwi, 2011). In the process of colonization, traditional authorities lost their legitimacy and eventually their control over resources to the colonial government, although they were still the recognized traditional owners of resources (Rathbone, 2000). The post-colonial government, after political independence in 1957, sidelined traditional authorities in governance, while recognizing them as resource owners, management and decision making passed to the State (Rathbone, 2000; Sasu, 2000; GoG, 1962). By the 1980s, however, inefficiencies in the public bureaucracy, political instability, population growth challenges, and other social factors pushed Ghana into a serious economic crisis which also affected the capacity to manage natural resources and many State services (Debrah 2014; Sasu 2005). The economic decline led to the intervention of the International Monetary Fund and the implementation of economic recovery programs. This led to a reduced role of the State in the economy and incentivized private sector investment to stimulate economic growth, and reoriented the economy to earn foreign exchange. Local governance structures set up in the 1970s were reinforced with a new Local Government Law, 1988 (PN DL 207) and other national decentralization policies to reduce poverty, coordinate national planning and ensure government services reached local people (Bawole, 2017).

Although environmental services were decentralized to local governments, natural resources, particularly timber and minerals, remained under the centralized control of State agencies (Amanor & Brown, 2003). Local governments and traditional authorities were thus denied control over natural resource wealth. At the same time, the private sector gained better access to resources under the centralized forest concessions regime. Furthermore, local communities' access to and use of forest resources were severely limited and criminalized.

Presently, the national constitution empowers the relevant ministries and state agencies to develop and implement policies to manage natural resources on behalf of the traditional owners of the resource and their people (GoG, 1992). As such, the Forestry Commission, through its Forest Services Division and Wildlife Division, manages 88 forest reserves including sixteen protected areas across the country. Protected areas in Ghana

consist of national parks, resource reserves, wildlife sanctuaries, and nature reserves (Forestry Commission, n.d.). Since traditional authorities and their communities remain the owners of forest reserves, they receive from the Forestry Commission a share of timber revenue as prescribed by the national constitution (GoG, 1992). Protected areas, however, are fully owned and managed by the State. Hence there is no obligation on the State to share revenue or to allow local people to access the area to collect non-timber forest products, even for domestic purposes. It is around these protected areas that the CREMA concept emerged. CREMAs were intended to address the drawbacks of the restricted access to protected areas and to foster collaboration with local people to protect wildlife in parks. Wildlife that ventured from the park into the CREMA or farmlands could be hunted and used by local people. Currently, 32 CREMAs are fully established and have received their certificates of devolution of management authority from the Minister for Lands and Natural Resources (Murray et al., 2018). There are over a dozen more CREMAs at different stages of formation around the country, showing its growing uptake.

Conceptualizing forest decentralization

Decentralization can be a complex concept subject to varied interpretations in practice and in research analysis. Decentralization generally refers to the process and the result of a transfer of decision-making authority and resources from a central power to lower levels of a political, administrative, or territorial hierarchy (Manor, 1999; Ribot, 2002b). Schneider (2003) suggests three core dimensions of the concept: fiscal, political, and administrative decentralization. Fiscal decentralization refers to the extent to which central governments cede fiscal resources and functions to their subsidiaries. Political decentralization sometimes referred to as democratic decentralization, is the extent to which central governments cede political functions of governance and representation to lower levels of government. Its distinguishing feature is the ability of local units to elect their representatives. Lastly, administrative decentralization refers to the level of autonomy local authorities have in their relations with the central government over a specific issue. Manor (1999) suggests that these three dimensions of decentralization need to be implemented together to yield their intended impact.

Administrative decentralization also manifests in different typologies such as deconcentration, delegation, and devolution (Ribot, 2002a; Schneider, 2003). Ribot (2002) and Schneider (2003) explain that central governments cede responsibilities to their field offices to enhance their geographic reach in deconcentration. The entities receiving deconcentrated powers maintain some autonomy, albeit minimal, and are directly under the central authority's hierarchical control. Delegation, on the other hand, cedes central government powers and responsibilities to semi-autonomous and autonomous bodies under contractual terms. The receiving bodies maintain their autonomy; however, the central government may control their autonomy under the contract terms. Lastly, local autonomous or semi-autonomous bodies receiving devolved powers enjoy the greatest extent of autonomy from the central authority compared to two other types. Devolved units possess wide discretionary powers over functions and responsibilities transferred and are only accountable to their constituents rather than the State. Despite the differences in the dimensions and types of decentralization, they are fluid and closely integrated and can best be differentiated by the level of autonomy of local units and to whom they are accountable. In this paper, I define decentralization in terms of devolution - the transfer of authority and responsibility from central governments to local level semi-autonomous or autonomous bodies to exercise discretionary power over resources and to account for the use of those powers to their constituents.

There are different approaches to assessing decentralization. Agrawal & Ribot (1999) proffer the actors, powers and accountability approach, a widely used framework for assessing forest decentralization schemes hence relevant for this study. The framework determines the type of decentralization by examining the local actors receiving power, the type of power transferred, and the direction of accountability. In this study, I focus on the type of power transferred to CREMAs.

According to the framework, central governments transfer three powers: legislative, executive, and judicial powers (Agrawal & Ribot, 1999). The framework explains that legislative powers allow local decentralized authorities and resource managers to create new collective action rules for resource use and set the structure for benefit distribution.

Executive powers enable local units to make decisions and execute the decisions by monitoring for compliance and imposing sanctions for violations of the agreed rules. The framework also suggests that legislative and executive powers are complementary and need to be transferred to the same local unit to be effective. They also offer that financial resources are necessary for local units to assert executive powers (Agrawal & Ribot, 1999). Lastly, judicial powers enable local units to adjudicate local grievances and disputes. In essence, in forest decentralization, property rights need to be transferred to local units.

Some scholars suggest that local devolved units need property rights: rights to own, manage, use and access resources, and the ability to set collective action rules (Schlager & Ostrom, 1992; Ribot, Agrawal & Larson, 2006). Property rights are essential, but they may not be the only guarantee for local control over resources (Cousins, 1997). In Ghana, local communities already have customary land tenure rights recognized by law, but they have no control over timber and minerals, even on their lands. Ribot and Peluso (2009) see property rights as the 'right to benefit from things' and, therefore, not based exclusively on legally enforceable rights. In their theory of access, they do not discount illegal means to benefit from resources. They also argue that factors such as technology, markets, labor, authority, knowledge, social status, and wealth determine how actors gain, control, or maintain access over resources. Combining these two frameworks helps to examine the type of powers transferred to CREMAs and to identify the various mechanisms through which CREMAs assert authority over natural resources, outside their official capabilities.

METHODOLOGY

Research approach and methods

I used qualitative research methods for this study. I sought to gain an in-depth understanding of the meaning and practice of devolution in CREMAs in Ghana from the perspectives of those actively involved and needed the flexibility to examine the emerging themes from the study (Babbie, 2014; Creswell, 2014). I sought to make meaning of the reality of research participants; hence, I also borrowed from an interpretive research paradigm. This paradigm makes sense of the social reality of research participants rather

than to test a hypothesis (Quinlan, 2017). I also borrowed from a critical research approach because I examined an issue of power between the central government and rural communities who have largely been marginalized in resource discourse. This approach helped me set this research in context and better appreciate my different research participants (Creswell, 2014). I used multiple qualitative strategies for data collection, including content analysis, case study, interviews, focus group discussions, and participant observation (Maxwell, 2005; Yin, 2003). I conducted the fieldwork for this study between July and mid-November 2019.

Case selection

I purposively selected three case studies: Amokwaw CREMA, Aowin CREMA, and Krokosua Hill CREMA, from the western part of the High Forest Zone of Ghana. The area has more than half of all CREMAs in Ghana and is seeking to expand the work of CREMAs. The cases were selected to reflect the diversity of CREMAs in the area. The cases were selected based on their years in existence; current functional status as active, dormant, or in revival; and proximity to either a Protected Area or a Forest Reserve. In each of these case studies, I purposively sampled three communities based on their proximity to the boundaries of the Forest Reserve or the Protected Area. All the communities selected in each CREMA had similar levels of activeness. Details of the cases can be found in the introductory chapter.

Sampling

I purposefully sampled nine national-level key informants and four district-level informants. They all worked on CREMA policy and with specific CREMAs in the landscape. They were therefore knowledgeable and relevant to this work (Richards & Morse 2013). In all the nine communities, I selected research participants into four focus groups, namely the CRMCs, Men-in-CREMA, Women-in-CREMA, and non-CREMA members. I created separate focus groups for men and women to ensure fair gender representation and a conducive space and time for women's participation. The non-CREMA focus group was a mix of three men and three women. This focus group only applied to Aowin CREMA, which had a distinction between core-CREMA members and non-members. I recruited community members into the focus groups with each CRMC, except for the Aowin research participants

who were randomly selected in community meetings held in each community. The full list of research participants is in Appendix A. On average, each focus group had six members. I also interviewed individual community members that CRMC or CEC members recommended to me. These individuals who had once been CREMA members provided insight into how the CREMAs worked in the past.

Besides the interviews, I also observed one CEC meeting, one national-level CREMA policy meeting, and visited two farms in each CREMA case.

Data collection

I used a semi-structured interview guide to conduct the interviews and to guide the focus group discussions. An interview guide allows research participants to speak without restriction and allows for follow up questions on relevant emerging responses. I asked questions about the CREMA's objectives, the processes leading to its creation, their perception of the CREMA's powers, and how they asserted that power. I also asked about the challenges of CREMAs, their CREMA implementation challenges, and what needed to be done to strengthen the CREMA. The full interview guide can be found in Appendix B, C, and D. I conducted all the local level interviews in the Akan language. My research assistant and four transcribers translated and transcribed the audio recordings of interviews into English for analysis. All translators spoke the Akan language and were social science graduates, but had very little understanding of the research theme. I read through the produced transcripts while listening to the recordings and referring to my field notebook to check for consistency and accuracy. I also took field notes during the interviews and during observations and made reflexive notes to identify emerging patterns and issues in the responses from participants.

Additionally, I did a content analysis, examining two types of documents: the constitutions of each of the three-case study CREMAs and District Assembly bylaws from two District Assemblies (Aowin and Juaboso). The Amokwaw constitution, apart from an abridged version, could not be secured. The constitutions were location-specific but followed the same structure, but the two bylaws were exact repetitions. I referred to additional national-level policy documents such as the Wildlife Division Policy for

Collaborative Community-Based Wildlife Management, the Brief Guide to Establishing CREMAs, and the Forest and Wildlife Policy, to understand the context and operations of CREMAs.

Analysis

I coded all the interviews and the CREMA documents. In the first round of coding of both transcripts and documents, I generally looked to find different expressions of responsibility of the CREMA, right of the CREMA, or its specific mandated functions. For the interviews, I used emergent coding to code the transcripts according to the responses to the broad thematic interview questions. The primary detail codes were mostly emergent. To understand the perceived powers of the CREMA, I looked for keywords like 'power', 'authority' and 'rights'. I also looked for other expressions that directly or in-context referred to these same concepts and coded as such. I ran two cycles of this first cycle coding to ensure consistency and uniformity in all the primary codes I had developed.

Subsequently, in my second-round coding, I looked for similarities in the primary detailed codes and reorganized them into abstract categories and sub-categories that reflected the essence of the codes. For instance, the category 'management powers' included sub-categories like 'arrest intruders,' 'manage trees on farms,' 'report offenders,' 'monitor loggers,' and 'protect trees from outsiders.' I also looked for the emerging patterns and differences between the categories and subcategories of the interviews and the content analysis. I similarly examined the similarities and differences in the emerging categories in relation to the devolution powers described by Ribot & Agarwal (1999) to create themes. I made annotations to codes and created reflexive memos to explain my rationale for assigning codes and categories.

Validity and reliability

To ensure the credibility of this study, I spent two weeks living in each of the three CREMAs participating in some community activities to get to understand the local context a bit better. I also peer debriefed with my research assistant, a national NGO staff working on CREMAs, and my research supervisor to clarify observations and ensure I followed the

required research rigor. Further, I member checked with the focus groups to be sure I was capturing the essence of their responses accurately. I triangulated responses from CRMCs and CECs with the male and female focus groups and vice versa. I also created an audit trail to document the research process and took reflexive notes on emerging thoughts. A colleague also coded randomly selected transcripts using the codebook I created. We discussed the differences in our coding to ensure consistency, thus, strengthen the reliability of the coding.

Results Summary

<i>Types of devolved power (Agrawal & Ribot, 1999)</i>	Powers devolved to CREMAs by law	Powers of CREMA outlined in constitutions	Powers exercised by CREMAs
<i>Power to make decisions Local units are autonomous, can raise revenue and have spending discretion</i>	<ul style="list-style-type: none"> -Final consent to the exploitation of any NR including timber in the CREMA allocated by the State or traditional authorities -Impose fees on the extraction of any NR authorized by the State -Impose fees on licensed bushmeat traders and NTFP collectors -Collect dues from members -Raise revenue from confiscated forest and wildlife products 	<ul style="list-style-type: none"> -Embargo use of community resources at defined times -Raise revenue from CREMA activities -Raise revenue from membership registration fees and monthly dues agreed by the finance committee of the CREMA -Take a fee from NTFPs collected and bushmeat traders -Elect leadership 	<ul style="list-style-type: none"> -Dedicate specific areas to protect and conserve as community reserve -Allocate trees -consent to felling trees on farms -Elect leaders
<i>Power to make rules Local units modify or create new rules over how and who can benefit from resources, and the extent to use resources</i>	<ul style="list-style-type: none"> -Define the terms and conditions for the hunt, capture and destruction of wildlife -Define terms and conditions for the hunting, capture and collection of non-timber forest products 	<ul style="list-style-type: none"> -Define rules and regulations about CREMA resources -Share resources that accrue to the CREMA with members and landowners -Control access to and regulate the use of natural resources in CREMA 	<ul style="list-style-type: none"> -Regulate hunting in the CREMA
<i>Power to ensure compliance Local units implement decisions, enforce rules and impose and enforce sanctions and are granted the fiscal and administrative resources for enforcement</i>	<ul style="list-style-type: none"> -Impose sanctions prescribed by traditional systems or CREMA disciplinary committee on all who violate the CREMA constitution and forest laws -Impose fines up to 250 penalty units on offenders of CREMA rules -Enforce national closed season bans on harvesting bushmeat -As 'game officers', arrest forest offenders without a warrant 	<ul style="list-style-type: none"> -Lead afforestation initiatives -Recruit new core members into the CREMA -Sanction members for acts of indiscipline including not attending meetings, engaging in corrupt, dishonest and fraudulent acts -Enforce rules restricting all access to natural resources except that authorized by the FC or the CEC 	<ul style="list-style-type: none"> -Arrest anyone or questioning anyone found entering the forest or the CREMA to extract a resource -Impose sanctions on offenders using traditional court systems -Arrest anyone in violation of CREMA rules -Raise local awareness on CREMA rules and encourage farmers to take up tree planting and tree registration on their farms -Monitor forestry officials
<i>Power of adjudication Local units resolve grievances and adjudicate disputes from making and enforcing rules</i>	<ul style="list-style-type: none"> -Traditional authorities address traditional land tenure conflicts 	<ul style="list-style-type: none"> -TAs and CECs redress conflicts 	<ul style="list-style-type: none"> -Internal resolution of disputes by CEC and CRMC Outside intervention by higher up TA in tenure disputes and inter-community disputes

Table 2.1 Summary of types of powers devolved to CREMAs in laws and those experienced by participants

RESULTS

This section presents the findings from the content analysis of CREMA legal documents, responses from research participants and field observations, and analysis of emerging findings. Under each type of devolved power explored, I define the powers transferred to the case CREMAs and explain how those powers are conceptualized in CREMA constitutions. I then examine the research participant's perspectives of the transferred powers and the powers held by the CREMAs generally. The final parts of each of the sub-sections analyze the disparity and reasons for the disparity between the powers transferred, powers received and powers exercised by CREMAs to fully assess decentralization in CREMAs.

Power to make decisions

CREMAs, according to their bylaw, may consent to natural resource extraction in their area and raise revenue for purposes they may determine. Although the Wildlife Division Policy intends to grant CREMAs the power to allocate rights to hunt wildlife in the CREMA, only consent powers are transferred in the bylaws. The CREMAs, through the CEC, may give their consent to any externally approved resource extraction of timber, non-timber forest products (NTFPs), hunting of wildlife authorized by state agencies or traditional authorities. Secondly, CREMAs can impose fees for externally approved extraction and on persons allowed to hunt or trade bushmeat and NTFPs.

In the constitutions, CREMAs have executive powers clearly outlining their processes for electing and removing CRMC and CEC members. Also, constitutions allow them to collect membership dues periodically, organize fundraising activities, and collect fees from resource extractions approved by the State and to use the proceeds according to their preferences. They can also decide on programs and activities annually to achieve the local aims of the CREMA. In Aowin CREMA, the constitution allows the CEC to “embargo the access and use of ‘community forests’ at certain periods” and “share benefits that accrue to the CREMA equitably.”

Research respondents in all three case studies confirmed electing their own representatives to the CRMC and CEC at the CREMA's creation. The leadership of the

CREMAs had not changed in Amokwaw and Krokosua Hills until the recent interventions by park managers and NGOs. As explained by a national wildlife official:

“...these CREMA executives are likely to be the original leaders at the inauguration of the CREMA. Many of them have expired terms and would need an overhaul of leadership of the CREMA across the country.”

Three major reasons, in the view of research participants, account for this inability to hold elections as defined in the constitution. Firstly, CREMA members cannot fund CEC meetings themselves and hence cannot change leaders. Secondly, some leaders are unwilling to relinquish their leadership even after their tenure expires due to fringe benefits they enjoy as CEC officers. Lastly, there is also an unwillingness among members to take up leadership functions. The latter was the case of Amokwaw, where members felt unable to deliver like the past CEC chairman, hence the delay in selecting new leadership. As a result of these, an external intervention was necessary to trigger leadership change in Krokosua Hills and Amokwaw.

A few inconsistencies manifest when examining the practice of executive powers in CREMAs. The Wildlife Policy seeks to devolve permit licensing to local units (Forestry Commission, 2004). However, older CREMAs -Krokosua Hills and Amokwaw, and the new CREMA - Aowin, had varying consent and wildlife allocation powers in law and practice. The older CREMAs exercised hunting permits rights in the past. As a former CEC member in Amokwaw recounted:

“...we were trained on how to manage and improve the animal populations and how to count the animals and create hunting quotas, but none of these worked. We had a system where members reported their kills to us as well as animal sightings, to monitor the population of the species. All this was theoretical, it was not possible to implement.”

Aowin CREMA neither have this delegated power nor exercised the ability to allocate hunting and NTFP collection permits. Such power, according to the Aowin constitution, lies with the Forestry Commission and not with the CREMA or any local leadership. Precluding

CREMAs from exercising allocation powers, in this case, returned significant powers intended for the CREMA to the Forestry Commission and the District Assembly.

Another contradiction is the power of CREMAs to consent to the extraction of natural resources in the CREMA. In Krokosua and Amokwaw, individual farmers, rather than the CREMA leadership, reserved and exercised this right on private lands. This questions the coherence between the CREMA by-laws and the Forestry Commission's Manuals of Procedures for logging in off-reserve which only recognizes the rights of individual farmers to give or withhold consent. An Aowin, CRMC, on their own volition, stopped a logging operation and a small-scale mining operation. Even though this action protected the community's lands and farms, many community members supported the mining. They felt reportedly aggrieved by the denial of job opportunities from the extraction.

The allocation of permits in CREMAs by the Forestry Commission questions the autonomy of CREMAs. A District Assembly bylaw allows local people to protect resources in their area, but the bylaw is subservient to the Acts of Parliament and Legislative Instruments which are higher-order laws. These laws mandate the Forestry Commission to allocate timber resources to private companies, even in CREMAs. Only private plantations and registered planted trees are exempted from the Forestry Commission's allocation. In Aowin and Krokosua Hills, logging companies operated legally in the CREMA but without local consent. Also, in Aowin, a mining company had acquired a small-scale mining concession in one of the CREMA communities, also without local consent. However, local agitations against logging companies, particularly in Aowin were construed by forest managers as obstruction of loggers. The bylaw, therefore, does not ring-fence local property from the reach of the Forestry Commission or other natural resource agencies or overrule their allocation powers. The lack of coherence in CREMA bylaws and other natural resource laws, and the inability of communities and farmers to withhold consent over resource extraction highlights the limits of CREMAs and their lack of autonomous local control.

Consent for the formation of the CREMA was very consistent in all three cases. In all three cases, the processes were started by NGOs or the Wildlife Division after acquiring the consent of land-owning traditional authorities. In Amokwaw, a focus group and an elite

respondent explained that the local communities had no choice but to agree to implement the CREMA which had already been consented to by the Paramount Chief. Despite initial fears of expropriation of their farmlands to extend the national park, community members eventually ceded to the desire of the Paramount Chief to establish the CREMA. It can be argued that accepting the establishment of CREMAs by local communities was an exercise of their consent powers notwithstanding the role of chiefs and the external influence of NGOs and the Wildlife Division.

Again, in exercising the decision-making powers of the CREMA, communities in all three cases set aside specific communal lands, usually spiritual places close to their community, to serve as habitat for wildlife and as the community's forest. All of such conserved communal lands in Amokwaw have since been converted to farmlands after the CREMA collapsed. In Krokosua Hills CREMA these places were intact because they were spiritual sites. Similarly, in Aowin, some communities had set aside burial sites for community conservation, but these sites did not appear well endowed with wildlife to be commercially exploited for revenue. One community in Krokosua Hills, however, mobilized resources for enrichment planting and had planted over 200 indigenous trees to improve biodiversity in that sacred site.

Two cases I examined came to exercise powers beyond what was granted them by the State. They illegally assumed the power to receive and approve requests to log trees on farms. Responding to the question of what powers the CREMA has, a CEC member in one of the case studies explained:

"...community members who wanted to use trees on their farms to roof their houses could consult with the CREMA Chairman and the CRMC to get permission to log and use that tree for that purpose. The CREMA chairman would usually work with the chief and approve the request. If any money accrued from the allocation, it went to the CREMA."

A few reasons account for this. First, focus groups in those CREMAs asserted that the CECs and CRMCs were local agents of the Forestry Commission: just like the revered forest guards of the early years of forestry in Ghana who were respected for their forest

protection. Members of the local communities also had this implicit understanding. CREMA officers, therefore, tapped into this power and approved requests from community members. Secondly, community members turned to their CREMA executives rather than forest managers for resource access approvals because they felt official processes were difficult. Besides, the forestry office was too far from the community. Forest managers, however, explained that the process was accessible and simple. Forestry managers on their part, acknowledged the important role of CREMAs in supporting forest protection at the local level but raised concerns whenever the CREMAs obstructed loggers, even for reasons deemed valid by the community.

Power to make rules

In decentralized regimes, central governments are expected to grant local devolved units the power to make and modify rules about the access and use of resources to define who, where, when, and how much resources can be extracted. These legislative powers were framed in the same way in the bylaws and in the CREMA constitutions. CREMAs can determine additional local conditions for extraction permits after such permits are issued by the State and approved by traditional authorities. They can also make additional laws to support the protection of natural resources in the CREMA when they find it necessary, and define processes for equitable sharing of benefits that accrue to the CREMA.

The clearest manifestation of this legislative power is the creation of the CREMA constitutions. All the rules for accessing and using the CREMA and sanctioning offenders are outlined in these constitutions. Research respondents in all three case studies recounted that the process of constitution-making involved extensive community-level and CREMA-level meetings over a period. These processes were facilitated by the Wildlife Division or NGOs who worked with a CREMA constitution template. Respondents also confirmed their ownership of the constitution, except for non-CREMA members in Aowin, who did not participate in the process although it was open to them. Embedded in these constitutions are rules about elections and recall of leaders, the ban on the use of chemicals for fishing, restrictions on the use of traps and snares for hunting, hunting during closed seasons, and other restrictions on accessing resources.

Besides the constitution, the cases examined made few new additional rules to the CREMA. In Krokosua Hills, the CREMA had started a new process to jointly develop a new constitution with a nearby CREMA and manage resources together. The process was also externally facilitated by NGOs and other non-state actors. Also, in Krokosua, new informal rules were added banning any and all access to the forest reserve. Although this was to prevent continued farming encroachment on the Forest Reserve, the CREMA had, in this community, criminalized a legitimate right to access the reserve to collect NTFPs for domestic consumption. Respondents in this community attributed the problem of illegal farming in the Krokosua Hills Forest Reserve to overbearing partisan political control of the district forest administration, the politicization of farming in the forest by different politicians, and the connivance of forest guards with local cocoa farmers.

A few factors account for the minimal exercise of the rule-making power of CREMA. Constitutions outline an extensive list of actions that are prohibited in the CREMA, hence there is no need for additional restrictions after they are passed. Respondents in all three cases mostly referred to rules they agreed to in the constitution at the start of the CREMA and rarely pointed to any new emerging rules. Secondly, old CREMAs found it difficult to sustain themselves after external support ended. Without funds to sustain themselves or even convene CEC meetings, there were hardly any opportunities to make new additional rules to the CREMA constitution. This emphasizes the challenge of the sustainability of CREMAs: an issue that has been identified by the national-level research participants as a major design flaw. Handing-off CREMAs to District Assemblies or wildlife managers, as an exit strategy, had not been successful in any of the cases examined. Additionally, the inability of CREMAs to generate revenue from resource use or drive their agenda made them dependent and weak¹. In both Krokosua Hills and Amokwaw, this inability of the CECs to fund their own meetings limited their ability to make additional rules for the CREMA and also contributed to their collapse.

Also, CREMAs were denied the opportunity for rule-making. In Aowin and Krokosua Hills, loggers failed to negotiate terms with the local CRMCs and farmers prior to

¹ I discuss the dependence and deference of CREMAs to external actors in the next chapter.

commencing operations. A large company operating in the Aowin area, for instance, was not aware of the existence of the CREMA to engage with them. Due to this lack of awareness, the rule-making opportunities for local communities were lost.

Some CREMA rules also conflicted with the pre-existing norms of natural resource management. Rights to access forest reserves in Aowin and Krokosua for non-timber forest products were restricted. In the case of the latter, accessing the reserves was met with stiff sanctions. Traditional habits such as fishing with chemicals, fishing by dissipating river in the channel during the dry season, or farming in riparian areas or group hunting were overturned by the CREMA. Hunting by setting bush fires, as well as going to farms with fire was banned in Krokosua Hills CREMA unlike before. These new rules demonstrated a transition of the communities to greater environmental awareness, despite the clash with traditional norms.

Power to ensure compliance

In the exercise of compliance powers, devolved units are expected to enforce collective action rules and execute decisions they make. CREMAs also had an array of executive powers to enforce compliance with national laws and their own rules. The three cases examined could enforce powers in three ways – ensure compliance with resource extraction rules, punish offenders, and lastly, arrest offenders. Among these three, the latter was more prominently exercised.

CREMA arrest powers stem from their role as ‘honorary game officers’ under the Consolidated Wildlife Act 1961 Act 43. This law mandates the Minister responsible for forest and wildlife resources to:

“...from time to time appoint honorary Game Officers by name or as holding an office to carry out all or any of the purposes of this act, or to do anything required by this to be done by a Game officer.” (GoG, 1961)

By this provision, CREMAs are regarded as ‘honorary game officers’ to enforce any and all of the provisions regulating wildlife resources and arrest anyone in violation. The Act further defines a ‘game officer’ as an officer of the Wildlife Division of the Forestry Commission who is required to:

“...arrest without warrant any person whom he [game officer] reasonably suspects to have been concerned in any offense punishable under this Act, if such person refuses to give his name or address or give a name or address which the game officer reasonably believes to be false, or if the game officer has reason to believe that such person will abscond.” Section 8, Act 43 (GoG, 1961).

This provision, consequently, made CREMAs wildlife officers and they could therefore assume such powers and challenge anyone suspected of violating wildlife regulations.

CREMAs also had resource extraction compliance powers and were responsible for ensuring that “ex-ante and ex-post exploitations standards and permit conditions” for permits awarded by any State Agency happened as intended. Besides arresting offending hunters and NTFP collectors, and compliance powers, CREMAs also imposed sanctions on offenders of CREMA and wildlife rules. These powers range from confiscating and selling illegal bushmeat and illegally harvested NTFPs and imposing on offenders’ fines of up to 250 penalty units, the equivalent of three thousand Ghana cedis (GHC 3,000.00) or five hundred and twenty dollars (\$520.00). Punitive powers also allowed traditional authorities or disciplinary committees of the CEC to sanction members and officers in violation of the CREMA.

These powers were also integrated into the CREMA constitutions and imposed an obligation on all community members to observe and enforce the rules and regulations of the CREMA. The constitutions also provided sanctions on individuals and executives that violated the rules. To ensure compliance, CREMAs also promoted environmental awareness to publicize CREMA rules. Community education outreach raised awareness of the closed season for hunting, the observation of buffer distance to rivers and streams during farming, fishing restrictions, restrictions on the use of fires in farms, and several other such prohibitions outlined in the constitutions.

Deducing from research participants responses, it is apparent that the most commonly exercised CREMA power was enforcement powers. In answering the question of what the power of the CREMA was, a majority of focus groups in all three case studies pointed to members’ ability to arrest offenders for illegally entering the forest or illegally

harvesting forest products without proper authorization. Elaborating on the power of arrest, a CRMC focus group participant in Krokosua Hills CREMA asserted:

“As I said, we have the power to arrest anyone particularly chainsaw loggers who do not have permits but yet enter the forest. In times past, we have arrested several of them. When they hear us approaching, they run and leave behind the beams and boards they have sawn. We report such incidents to FSD and our leaders who later come to evacuate them from the forest.”

In order to arrest offenders, all three case studies confirmed that they patrolled the forest from time to time and also mounted roadside checks to control products that left their communities. They sent arrested offenders and their products to forest and park managers. Though none of the three case studies were able to provide summary information about the number of arrests in a year, each case study and focus group had compelling stories of encounters and arrest of offenders in their community or a neighboring CREMA community. Although other focus groups validated some of these stories, these cases were not documented at wildlife or forest offices.

An important component of exercising their compliance powers was educating stakeholders to be aware of the rules for compliance. All three case studies raised awareness on the wildlife and NTFP prohibitions. In responding to the question “what does the CREMA do?” a women’s focus group in Krokosua Hills CREMA responded:

“...every dry season, the community leaders make announcements telling us not to get into the forest with any fire. They sometimes get volunteers to lookout and arrest hunters and those going to their farms with any form of fire. They also keep telling us from time to time not to cut down trees on our farms.”

In all three cases, the CREMAs educated their communities not to enter forests, not to illegally fish, and to observe the closed season for hunting.

A further expression of the enforcement powers besides raising awareness for compliance was their ability to impose sanctions. In a unique case in Krokosua Hills CREMA, a local chief used his traditional authority to enforce the CREMA rules and sanction those who entered the Forest Reserve. CREMA offenses in this community were treated as violation of the chief’s orders; hence, offenders were subject to substantial punitive fines at

the chief's court even before the offender was handed over to the authorities. The chief's close involvement with the CRMC was inspired by lessons from a learning visit facilitated by a group of NGOs and cocoa-purchasing companies and demand from the Paramount Chief for improved forest stewardship by local chiefs. Research participants in this chief's community consequently feared to violate his orders. This shows the influential role of traditional enforcement mechanisms in CREMAs. In Aowin on the other hand, traditional authorities were unable to impose traditional sanctions because they felt statutory law had weakened their powers and human rights NGOs were overly critical of their powers. In this case, they did not reinforce CREMA rules or have a clear role in CREMA besides providing moral support.

In examining the exercise of compliance powers of CREMAs, five mitigating issues emerge: the quest for validation of authority, the scope of enforcement powers, security risks to members, the weak official punitive regime for wildlife violation, and gender disparity in the exercise of power.

Research participants in all three case studies repeatedly emphasized their need for a Forestry Commission-issued identity card to prove to offenders their power to arrest anyone for any offense in the CREMA or the protected area or the forest reserve. They saw their power in their association with the Forestry Commission. As articulated by a male respondent in the Amokwaw CREMA, "...we need ID cards to be able to show our authority and power to arrest offenders, and even mount roadside checks." Fewer others held a contrary view that the arrest power of the CREMA was inherent in the constitution and bylaw; hence they did not need identity cards to assert that power. Some respondents also requested for additional materials such as uniforms, motorbikes, patrol vehicles, torchlights, and even guns to more effectively fight off illegal hunters and artisanal loggers.

In all three cases, the physical area of CREMA enforcement powers was not clear to members. While some felt their power was limited to the designated CREMA area, others claimed their authority and responsibilities extended to the forest reserve or the protected area. Park managers and forestry officials in all the three cases similarly expressed mixed perceptions of the domain of authority of CREMAs. As a result, interventions in protected

areas or forest reserves were judged by authorities based on its effects. For instance, park managers considered citing and reporting poachers in parks as commendable but frowned on collective action by CREMA against poachers within it.

Exercising compliance powers had negative implications for the human security of CREMA executives and members in all three cases. Many research participants voiced concerns for their safety when they reported offenders to forestry officials. Explaining the challenges facing CREMAs, a CRMC member in Krokousa Hills CREMA stated:

“We face intimidation, hatred and confrontation even from our neighbors and when our identity as informants is revealed to the offenders. We are seen to be working against our neighbors and the interests of those offenders. I have on one occasion been threatened for doing this work.”

Research participants identified forestry officials as complicit in exposing informants to offenders. Such exposure opened informants to violent reprisal attacks. CREMAs in Krokosua Hills and Amokwaw cited an instance each of the death of a community member who had reported illegal logging in the community and had been exposed by a park or forestry official. Situations such as this deepened the mistrust of park managers and forestry officials. In a case in Aowin, the youth threatened CRMC members for blocking a small-scale mining operation and consequently denying them job opportunities. As explained by that specific CRMC focus group:

“What we do, that is resisting illegal mining and speaking against the illegal entry into the forest, makes people hate us. We also do not feel safe in this community because anybody can harm us anytime, spiritually, or physically at any time. ...we have received several threats.”

Reporting offending neighbors to the CRMC, on the other hand, exposed complainants to social shaming and confrontation from families of the offender. In Aowin particularly, residents were not used to the new CREMA rules against age-old practices such as fishing with chemicals, or farming near river bodies, or group hunting. These new rules were the result of new conservation awareness of CREMA members and that underlines the limitation of this CREMA which had a larger percentage of the community not being core

members. The rules challenged traditional practices. Even though these rules had an intrinsic social and ecological benefits, the broader community's internalization was difficult leading to the opposition. In essence, insecurity was a risk to effectively enforcing CREMA rules against outsiders but adoption of CREMA rules was not without its challenges, including attacks on complaining neighbors.

Additionally, the lack of prosecution of forest and wildlife law offenders and weak legal sanctions regime frustrated CREMA attempts at law enforcement. Research participants in Krokosua Hills CREMA felt that forestry officials had failed to prosecute offenders and impose deterrent punishments. The sentiment was similar in Amokwaw, where a participant complained that the park authorities failed to question or arrest a local restaurant operator serving highly-restricted giant pangolin dishes during the closed season. Highlighting the problem of weak law enforcement, a key informant in Amokwaw stated,

“The park had problems with law enforcement for many reasons, one being that the punitive regime at the courts and as prescribed in law was not a deterrent. Offenders were only fined a paltry two hundred Ghana Cedis or faced six months in prison. The hunters were willing to risk hunting because profits from one week of good hunting far outweighed the cost in fines imposed on them.”

Given the mistrust of park rangers and fueled by allegations of connivance, respondents in Amokwaw felt disappointed by the park administration. They saw themselves as the real protectors of the forest. Further compounding mistrust was the failure of park officials to reward community informants or share benefits from confiscated wildlife with local communities including CREMAs. Respondents in Amokwaw found the lack of community rewards for reporting offenses demoralizing.

Besides the perception of weak enforcement of forest laws, the exercise of enforcement powers had a gender dimension. The power of arrest was mostly exercised by young men in all three cases and much less by women and older men. Older men felt they did not have the required energy for long walks into the forest to arrest offenders. Female participants in all cases felt the exercise of this power exposed them to physical violence from offenders. However, due to the health implication of fishing with noxious substances

and the low stream flows in the dry season, women in Aowin CREMA were more inclined and aggressive to respond to illegal fishing methods and even discipline children swimming in rivers. Also, the collective community condemnation of illegal fishing methods created a less threatening environment to act on such action, even though they risked confrontation and shaming from affected neighbors.

Lastly, there were a lot of functions of the CREMAs that had no accompanying decentralized fiscal support. None of the three CREMAs generated income from their resources. In all three cases, CREMAs were dependent on external financial support from NGOs or external actors to remain active as CREMAs. A respondent in Amokwaw felt logging could have improved the finances of the CREMA. He also felt frustrated by the current tree tenure policy which deprived local people of timber benefits on their lands. Although several NGOs had supported Amokwaw and Krokosua Hills CREMA with alternative livelihood projects to start handicrafts production, fish farming, soap making, and honey production, none of them was sustained. In Amokwaw, a donor-funded revolving fund for the CREMA, to subsidize the cost of fertilizers for farming, collapsed after the first round of disbursement. Fund managers couldn't recover the loans from the beneficiaries while members questioned the fairness in the criteria for selecting these beneficiaries. This had a negative effect on members' morale causing many of them to stop attending to the CREMA and its activities. A national key informant interviewed explained that alternative livelihood projects and related interventions in this CREMA failed mainly due to poor integration of such enterprises and products to markets, and the unmanageable burdens such interventions imposed on farmers. Providing alternative livelihoods is not comparable to fiscal decentralization.

Power of adjudication

In a decentralized regime, local devolved units also need to have judicial powers and the capacity to set up complaints and grievance redress mechanisms and adjudicate conflicts. As with rule-making powers, the exercise of adjudication powers was less pronounced in CREMAs. The Wildlife Division and the bylaws encourage collaboration with traditional authorities to resolve disputes on lands under traditional tenure (Forestry

Commission 2000). Similarly, the CREMA constitutions are thin on adjudication and deferred adjudication of land disputes to traditional institutions. The CREMA disciplinary committee was expected to settle grievances among members. In practice, CREMA leadership settled emerging disputes themselves and only referred to traditional redress mechanisms when they deem it necessary. Traditional redress mechanisms become particularly crucial in disagreements between two communities where either one or both are in the CREMA. Such disputes, as explained in Amokwaw and Krokosua Hills CREMAs, were resolved by the Paramount chiefs court using traditional norms and rules. In Aowin, the usual dispute resolution was to involve traditional authorities only after the CRMC and the CEC respectively, had failed to address such conflicts. In all three case studies, dispute resolution was less formal and deeply embedded in cultural practices and usages. There are no clearly articulated official complaint mechanisms in the CREMAs except the traditional usages and common-sense approach to problem-solving.

DISCUSSION: Reflections on CREMAs as a form of forest decentralization

In devolution, central government units are expected to transfer property rights or powers to local autonomous or semi-autonomous units to exercise executive, legislative and judicial powers over their natural resources to improve livelihoods and meet other desired objectives. The findings of this study show that contrary to claims to devolution of management authority over natural resources, only hunting rights are transferred, and even these rights have rarely been exercised by CREMA. Furthermore, the CREMAs are not protected from externally-sanctioned natural resource extraction. The three CREMAs also assert enforcement powers, enforcing restricted use of resources outlined in their bylaws or constitutions, and exercised much less of legislative or judicial powers. From the analysis of the powers devolved to CREMAs, a number of important themes emerge that merit closer examination. Among them are the relations between centralized and decentralized authorities, the dilemma of structural parallelism, and the paradox of decentralization.

Decentralizing powers versus passing responsibilities

Across the cases, CREMAs currently appear to be designed to realize the Wildlife Division's conservation outcomes through law enforcement. Through CREMAs, the State better enforces restrictions on local resources. CREMAs had been handed a litany of enforcement responsibilities without the accompanying resources and incentives to keep them functional or sustainably improve livelihoods. However, it is not uncommon for CBNRM areas to be handed many responsibilities of the State without the relevant fiscal decentralization to realize expected outcomes (Cronkleton, Saigal, & Pulhin, 2012). Larson (2002) found similar patterns in poor municipalities managing community forests in Nicaragua. Despite their enormous responsibilities, municipalities lacked the resources to recruit and maintain technical personnel to manage the forests as expected and were largely dependent on NGOs and international donors for survival. In Larson's (2002) view, governments need to transfer fiscal resources, provide appropriate incentives, and improve the fiscal capacities of such municipalities to provide a stronger impetus for local resource management. Decentralization with limited resources and incentives could hamstring local units and reduce their capacity and ability to perform. Ghana's constitution, however, sees local communities as subjects in the context of natural resources rather than citizens that can justifiably demand their fair share of resource rights (GoG, 1992).

Decentralization is deeply political yet governments do not relinquish their preferred powers to local people to make it work as intended. Anstey (2009), studying local resource governance reforms in Mozambique observed that local communities' rights were still subject to the State's powers despite the claims of decentralization. He argues that one reason for the government's powers over decentralization processes is that the decentralization discourse has emphasized central governments as the center and start of power decentralization – that is to say, decentralizing is framed as a top-down approach. As a result, central governments determine the direction, pattern, pace, and scope of the decentralization (Anstey, 2009). Similarly, CREMAs have been framed by the central government in terms that do not negatively impact their powers or necessarily reflect local priorities or desired goals. Hence expectations and outcomes of CREMAs examined in previous studies are at variance (Agyare, et al., 2015).

The dilemma of structural parallelism in CREMAs

Community-based resource management schemes can be a mechanism for regaining control over resources lost during colonialism and the era of centralized State forest management. Still reconciling traditional institutions with new community management structures can be challenging. Some forest decentralization scholars have advanced that the institutional culture of decentralized units and how it is structured are major determinants of the success or failure of a devolved system (Zulu 2008). CREMAs, created new institutions for resource control – new rules, new enforcers, and new positions such as the CRMC and the CEC, with devolved powers from the Forestry Commission, but they were not clearly integrated with traditional natural resources norms and institutions. Each CREMA, therefore, figured out their relationship with traditional institutions and which existing practices to adopt or abolish. As an advantage, this approach has allowed vulnerable social groups such as migrant farmers and women, traditionally excluded from leadership, to become influential and even become CREMA officers, as seen in Aowin and Krokosua Hills CREMA. Parallel governance structures chips away some of the authority of traditional rulers and further degrades the powers they retained from colonialism and centralized state rule (Awortwi 2011). Vedeld (2000), however, cautions that traditional authorities and their lack of accountability could ultimately undermine local resource governance and entrench the marginalization and exclusion of certain local social groups. The choice to use traditional institutions or new formal institutions is contentious and this points to the need for careful consideration when establishing new local governance systems for natural resources.

Zulu (2008), examining community forest management systems in Southern Malawi, highlights this dilemma of imposing new structures for resource governance on traditional governance institutions. He argues that the concentration of attention, capacity, and resources on new leaders and governance institutions contributed largely to bureaucratic and unaccountable leadership, and corrupted the new community forest management bodies. He found from his study that only traditional leaders who could counterbalance the power of these new environmental elites successfully managed their local resources (Zulu,

208). Magessa, Wynne-Jones & Hockley (2020) and Béné *et al.*, (2009) also found in Tanzania contrasting cases of marginalized local committees and domineering traditional authorities when they examined local fisheries, with each having a different effect on the resource. When such new institutions potentially threaten existing traditional institutions, Chinangwa *et al.*, (2016) suggest that recognizing and integrating traditional norms is necessary, especially where it is desirable.

The paradox of forest decentralization

The idea of devolving management authority to local communities through CREMAs in a centralized natural resource governance regime in Ghana is paradoxical. The assertion of often repeated that CREMAs have devolved authority over natural resources, but real power over natural resources remains in the State. As seen in the cases, CREMA did not enjoy exclusive area status like private plantations, even though there are similar (Client Earth, 2013). Also, the Forestry Commission claims to be devolving power when it is highly centralized is a paradox. Even though CREMAs are established in law, their legal framework is subservient to the existing natural resource laws which are framed as Acts of Parliament and with greater and higher-level effect, compared to bylaws. As such, laws stating centralized ownership and management of natural resource supersede bylaws that state otherwise.

Scholars examining natural resources decentralization in Ghana have also concluded that forest administration continues to be highly centralized under a large-scale concessions management regime and run by national-level State agencies in alliance with big logging and mining corporations, leaving out district assemblies, small-scale producers, and local communities without control or legal access to timber resources in Ghana (Sasu 2005; Teye 2011; Yeboah-Assiamah 2016). They suggest that this centralized concession regime fails to decentralize natural resources as fiscal resources to district assemblies to pursue local development in their localities, thus undermining the entire process of decentralization in Ghana. Also, the current centralized administration of tree tenure leaves CREMAs with no control over resources on their property (Acheampong & Marfo 2011; Hajjar 2015). Decentralizing tree tenure to local communities would in principle give ownership and

decision-making powers over trees to local farmers, but this was not the case in Ghana or the case of CREMAs.

The tendency to use community-based resource management approaches to strengthen state control is not uncommon in the practice of community forestry globally. In the comparative analysis of forest decentralization processes in six countries Ribot, Agrawal & Larson (2006) showed that even though community forests were allocated forest rights and could consent to commercial exploitation, they were severely constrained from exercising their powers by the covert and overt actions of high-level government officials. The cases they examined suggest that central governments pursue decentralization policies to gain political control and deliberately frustrate local control of resources by various strategies to render the decentralization faulty and unrealizable. Giessen *et al.* (2016) and Baral *et al.* (2018) similarly point to examples in several countries of overt and covert use of State power to recentralize power through decentralization strategies. Arke (2000), in his critique of representative democracy in Africa, suggested that vested interests are opposed to the loss of primary control of power and therefore thwart and stifle efforts at decentralization. In CREMAs we see the absence of local control despite claims of devolution, and we see claims of devolution from a highly centralized Forestry Commission keeping all its powers. We also see claims to devolution when the resource management regime is still defined by the State.

CONCLUSIONS

Ghana's forest decentralization through CREMAs attempts to decentralize resource control to local communities to improve their participation in resource management. Using the powers framework adapted from Agrawal & Ribot (1999), it is clear that CREMAs are granted rights and also exercise some legislative, executive, and judicial powers of resources. Yet, from the cases examined, discretionary power to exercise autonomous control over high-value natural resources in the local community, specifically, timber remains with the State. The three cases also showed varied control over wildlife hunting rather than control over a broad range of natural resources. Some of these cases, also by their proximity to forests, their association with forest authorities, and their perceived

powers as CREMA leaders approved logging requests from the community, although they have no such mandate. Also, CREMAs enforce a long list of restrictions on the use of forest resources, and in all cases examined, men, rather than women had a stronger aptitude to assert this right. The enforcement of these restrictions did not directly inure to community benefit and furthermore enforcement threatened the security and safety of CREMA members and leaders. Furthermore, in all the cases examined, CREMAs did not introduce new rules after approving their constitutions. Traditional redress mechanisms also played influential roles in dispute resolution. These findings show that CREMAs have major handicaps in exercising authority and autonomy over resources in their defined geographical space and are hardly able to raise revenue from the resource to sustain themselves. CREMAs could do better with stronger rights control and generate revenue from their local resources, and other external support to better manage resources to improve their local livelihoods.

The analysis of CREMA legal texts and research participant responses point to varying rights over hunting among the cases examined, and suppression of traditional use rights of local communities to access and collect non-timber forest products from forest reserves for domestic purposes. The analysis also shows conflicts between the rights of individual farmers consent to logging on their farms as outlined in logging manuals and consent functions of CECs. At the broader policy level, the centralizing resource governance regime, and more specifically the centralization of tree tenure, contradicts claims of devolved resource control to CREMAs. Additionally, the weak legal status of CREMAs and the district assembly bylaws subject them to higher-order resource extraction laws passed by the Parliament.

This weak legal grounding of CREMAs and conflicts that are present in the natural resource regime calls for more careful examination to ensure greater policy coherence. Defining the roles of the different resource management institutions particularly the district assembly, traditional authorities, CREMAs and the Forestry Commission, with respect to tree tenure for instance, could provide greater clarity on who exercises what control and at what level. Giving tree tenure control to CREMAs and their local communities would be

decentralizing a critical substantial resource compared to the control over wildlife hunting. Greater local control will allow CREMAs to focus on building the forest wealth of their respective areas including keeping naturally occurring trees on their farmlands and fallow lands. This could begin with enacting an Act of Parliament, as practitioners have proposed, that passes substantial resource powers to CREMAs, to secure them from unnecessary external resource allocations.

It is also manifest that CREMAs like other local units and recipients of decentralized powers are not limited to exercising powers they receive, but come to gain and control resources outside their domain of authority through illegal means as well. For this reason, it is important to examine the performed powers, functions, and responsibilities of devolved agents to better determine the real extent of decentralization in a jurisdiction. The logical emerging question from this work is the impact that the current devolved and exercised powers of CREMAs have on local communities in their quest to realize environmental sustainability and community development. This question is explored in the next paper.

--

Chapter 3: Examining CREMA outcomes: Community Empowerment.

INTRODUCTION

CBNRM is a widely practiced form of resource management that emphasizes local control by local institutions (Agrawal & Gupta 2005; Coleman & Fleischman, 2012). It is based on the notion that the local people can facilitate collective action and develop collective action rules to manage resources for their interest (Ostrom, 1999; Schlager & Ostrom, 1992). When communities, through CBNRM gain legislative, executive and judicial powers over resources they become empowered to make their own decisions about resources, and theoretically are better able to benefit from the use of the resources (Kull, 2002; Marcus, 2019). As a result, it has been used as a poverty reduction strategy in southern African countries (Jones, 2004 in Suich, 2013). But transfer of power to local communities hardly happens as theoretically conceived (Ribot, 2002a; Ribot, Agrawal, & Larson 2006). When communities are denied control over resources and excluded from resource decision making it disenfranchises and disempowers them (Dressler et al., 2010). Ghana introduced Community Resource Management Areas (CREMAs) as a response to the challenges of managing protected areas (Forestry Commission, 2000b). Like other CBNRM models, CREMAs seek to empower local people for conservation and community development (Forestry Commission, 2004).

In the previous chapter, I examined the powers devolved to CREMAs and the extent of use of the devolved power. I found that CREMAs mainly exercise law enforcement powers and decision-making powers, and to a lesser extent lawmaking, and judicial powers. The findings point to the need for an examination of how devolved powers contributed to the empowerment of CREMA communities. Additionally, existing literature assessing CREMAs approach them from a conservation lens, or institutional assessment perspective looking at the disadvantaged economic and power position of local communities. This paper seeks to contribute to this area by exploring how local communities realize empowerment from CREMA interventions. In this paper, I examine the extent to which the powers devolved to CREMAs contribute to community empowerment or disempowerment and how different groups within communities are affected by it. This paper's findings contribute to

an understanding of CREMA's impact on local communities in Ghana, frames CREMAs within a political context, and provides reflections on how current approaches to CREMAs are impacting the capabilities of local communities. The first section of this paper outlines the trajectory of forest management and CREMA development in Ghana and examines the major concepts used in this paper – community, power, and empowerment. I continue with a presentation of the findings from the field data collection and discuss some emerging issues for consideration in CREMA approaches and CBNRM more generally.

BACKGROUND AND CONTEXT

Forest management in Ghana

Forest management in Ghana is a story of changing management regimes, from local to state control, and contemporarily back to local control. The colonial government appropriated natural resources, particularly forests from the hands of traditional authorities into the various formal resource management institutions in the colonial era (Forestry Commission, 2000b; Tsikata, 1997). In the post-independence era, the new state inherited resource control from the colonial government and has since consolidated its power through legislation: many of which exist until today (Sasu, 2005). Although Ghana started a political decentralization process in the 1980s to return development decision making to local political units, natural resource management is outside of this process (Sasu 2005; Teye, 2011). Currently, the Forestry Commission manages protected areas as state property, and manages timber resources, including naturally regenerating timber on private lands, on behalf of the original owners – the traditional authorities and their people. The Commission and the State also retain the larger percentage of revenue from resource extraction, at the expense of local communities fringing the forest (Lund, Carlsen, & Treue 2012). These persisting policies exclude local communities from benefiting from resource use and explains their rationale for converting forests for agriculture, illegal farming in the forest, and connivance with illegal loggers to benefit from naturally emergent trees (Acheampong & Marfo, 2011).

In the face of these challenges, governments have tried different initiatives over the years to encourage local participation in forest governance. Among these initiatives are

Social Responsibility Agreements which seek to strengthen community voices and benefits in local forest logging operations. Forest Forums - local platforms for forest and natural resource discussions, were also created to foster local forest stakeholder deliberations. Other mechanisms include the Community Biodiversity Advisory Groups (CBAGs) in which forest fringe communities formed committees to clear forest reserve boundaries and help suppress bush fires. Also, the Modified Taungya Plantation model engages local farmers in short term agroforestry in degraded forest reserves. The CREMA model, which started in the early 2000s as a form of CBNRM represents one of the more deliberate efforts at systemically involving local people in resource management (Forestry Commission, 2000b, 2004a). CREMAs encourage local participation in the protection of protected areas; reduce pressure on wildlife hunted for game in protected areas; and reverse park encroachments which negatively impacted the habitats of wildlife (Baruah, 2015; Forestry Commission, 2004a).

Assessing CBNRM

CBNRM regimes are setup for diverse reasons hence assessing them can be challenging. CBNRM approaches address perceived or real tragedies of free-for-all-commons while improving the livelihoods of the local resource dependent peoples (Agrawal, 2007; Ostrom, 2000). It is an alternative to centralized control of forests, which is often characterized by exclusion and expulsion of local people from their traditional resources (Brockington & Igoe 2006). Increasingly, CBNRM areas are set up for various reasons to promote local ecological protection, improve local participation in resource management, and improve livelihoods. The results of CBNRM assessments therefore show a mix of successes and failures based on rationale for its setup, and the approaches to the assessment (Agrawal, 2001; Hajjar et al., 2016; Pagdee, Kim, and Daugherty, 2006).

In this paper, I focus on the social outcomes and not the conservation outcomes of CREMAs. CBNRM scholars often see active participation; asserting rights; access to social, political and cultural capital; and sometimes economic potential conditions and sometimes evidence of performance (Agrawal, 2001; Arts & de Koning, 2017; Piabuo, Foundjem-Tita, & Minang, 2018a) In this paper, I focus on assessing empowerment as an outcome of CREMAs.

Defining a community

Community is sometimes an elusive construct and defined by its context and use. It can be seen as a place-based concept or a territory-free concept (Theodori, 2005). In CBNRM literature, it is a place-based concept expressed in three general terms: as a spatial unit, as a social structure, or a conceptual body of shared norms and culture (Agrawal & Gibson, 1999). As a spatial unit a community is a distinct intimate group of people living together; however, living together does not say much about how people relate and interact for resource management. Referring to the community as a homogeneous group is reductionist and does not tell how differences in social status, incomes, and diversities impact the use of resources and vice-versa (Agrawal & Gibson, 1999). A more appropriate definition should therefore emphasize relations, interaction and shared interests of the group irrespective of size or makeup. Laverack & Wallerstein (2001) suggest that a sense of collective interest in solving a common problem through collective action is one of the ways communities can empower themselves. This study uses Agrawal and Gibson's, (1999) conception of community as a body of people bound together by shared norms or interests developed through continuous interaction over time. The shared norm in this context is the commitment to establish a CREMA to protect and manage local resources.

'Power' in empowerment

Deeply embedded in empowerment is the crucial concept of power (Rowlands 1996). Dahl (1957) defines power as a relationship among actors where one has the ability to influence or induce another to act in a way he or she would not ordinarily act. This view of power is coercive and ignores the subtle differences between power and influence, allowing Steven Luke to suggest that power is the ability to cause change (Morriss, 2006). In essence, power is ubiquitous to all societies and human institutions. It is either a zero-sum game or mutually generative. It is measurable when comparing two entities or by how one entity causes change, and lastly, it is about freedom and self-expression (Corrêa Cavalieri & Neves Almeida, 2018; Rowlands, 1996). Power in feminist literature usually manifests as 'power-over' or domination of men over other men, men over women, and domination of

social, economic, and political groups and institutions over marginalized peoples (Rowland, 1996). This power over is sometimes internalized and subtle, but very present among marginalized groups (Rowlands, *ibid*).

CBNRM sometimes emphasizes ecological outcomes while ignoring contributory underlying factors such as power inequity and social injustice (De Royer, Van Noordwijk, & Roshetko, 2018). However, the CBNRM and forest decentralization are deeply political because they start with a privileged central government transferring power to weak and vulnerable local structures (Anstey, 2009). Central governments in many decentralized schemes still exercise various forms of 'power over' the local units expected to be independent and autonomous (Ribot et al., 2006; Rowlands, 1996) despite claims of local autonomy. The subjugated power of devolved bodies reduces their independence, effectiveness, and ability to demand local accountability from the center (Agrawal & Ribot, 1999; Ribot et al., 2006). Communities with transferred powers from the State should be able to drive their own change, be able to protect their resources from powerful actors such as the State and government officials, and define the terms of the relations they have with the State and other external actors.

Empowerment and disempowerment

Empowerment is quite often used with different meanings in many different contexts. In rural development literature, empowerment connotes active participation and decision-making roles of communities in community projects (Rowlands, 1996; Storey, 1999), but participation is a limited view of empowerment. A more expanded definition sees empowerment as both a process and an outcome of individual and collective competence, ability to control, and proactive engagement in the sociopolitical processes in society (Perkins & Zimmerman 1995; Rappaport, 1985). As a process, community empowerment is a continuum which begins when an individual realizes his or her self-esteem and works with others in small groups or in large organizations to bring social and political action and change ultimately (Laverack & Wallerstein, 2001). As a continuum, empowerment starts from the individual and moves to the collective through organizations to community empowerment. Community empowerment, therefore, takes much longer to

realize and it is also ongoing. In this exploratory study, I will frame empowerment as a collective outcome at the level of the community.

Lord and Hutchison (1993) explain that empowerment contrasts with powerlessness, which powerlessness manifests as economic inequality and oppressive power over people, or the internalized belief that change is not possible. They explain that social isolation, unresponsive and ineffective social interventions, poverty, and abuse trigger powerlessness or disempowerment at the individual level leading to apathy and unwillingness to struggle to regain control (Lord & Hutchinson, *ibid*). Others have also associated disempowerment with a lack of ability, choice, and oppression from power holders (Ganle, Afriyie, & Segbefia, 2015; McKenry et al., 2006). Feminist scholars argue that to break down disempowerment, interventions must deliberately deconstruct negative social paradigms of marginalized people and reconstruct in them a sense of capacity to exercise their rights and assert their power for their wellbeing (Dongier et al., 2002; Ganle, Afriyie, & Segbefia, 2015; Rowlands, 1996). Therefore, for CREMAs to really empower people, they must deliberately remove conditions of power and social inequities against local communities. In this study, I frame disempowerment as the conditions that allow for marginalization and social inequity of CREMA communities.

Community empowerment framework

Community empowerment can be examined as a process, or as an outcome and at the individual or collective levels. Community empowerment in health studies takes the process approach and focuses attention on capacities, resources, skills, and interactions of individuals and local organizations over the period of an intervention (Laverack & Wallerstein, 2001). As an outcome, it focuses on the broader impacts of an intervention at the community level, although these impacts take longer than short project cycles (Lele et al. 2010). CREMAs have been in existence since 2000, hence this is a period long enough to assess for empowerment impact. As an exploratory study intended to generate knowledge and point to areas for more closer study, this study assesses the impact of CREMAs on the community. I, therefore, take an outcome view of community empowerment and measure it at the collective level rather than the individual level.

Very few frameworks exist for measuring community empowerment of CBNRM interventions. However, Scheyvens (1999) provides a framework that assesses community empowerment as an outcome and at the broad community level, which makes it well suited for exploratory studies. She applied this framework to assess the impact of ecotourism in rural communities and to distinguish responsibly implemented ecotourism projects from others. Her framework identifies four dimensions of empowerment: political, economic, social, and psychological, and also differentiates empowerment from disempowerment.

Scheyvens (1999) explains political empowerment as the recognition of voices of local communities, particularly youth and women, in decision making and the ability to exercise and exert control over devolved resources. She also finds autocratic and exclusive community structures disempowering because they do not represent local voices in decision making or allow for meaningful participation. When interventions improve the sense of pride and protected cultural heritage, Scheyvens refers to that as psychological empowerment. On the other hand, interventions that interfere, disrupt, and diminish the value of customs and cultural values are psychologically disempowering. Furthermore, Scheyvens sees improved social cohesion, stronger community ties, and the development of social amenities as signs of social empowerment. On the other hand, interventions disempower communities when they breed social conflicts and increase social inequity. Lastly, when interventions open business and employment opportunities, provide a reliable stable income, and provide secure access to productive resources, communities become economically empowered. However, elite capture of benefits, restricted access to productive resources, and marginalization in accessing economic opportunities are signs of economic disempowerment.

In this paper, I examine the effectiveness of CREMA interventions in the three cases. I use this community empowerment framework as an analytical guide to structure and present the findings on the extent to which CREMAs are empowering and or disempowering local people in the cases examined.

METHODOLOGY

Research approach and methods

I used qualitative research methods to examine the impacts of CREMAs on empowerment. This process allows research participants greater freedom to express themselves and allow for flexibility to probe deeper into emerging themes and to understand the perspectives of participants (Babbie, 2014; Creswell, 2014). Borrowing from political ecology and a critical research approach allowed me to see the differences of power in the relations between local communities and national institutions involved in the CREMA processes and my privileged position as an outsider. I also used a multiple case study approach to understand the experiences for empowerment in different settings (Maxwell, 2005; Yin, 2003). I conducted the fieldwork for this study between July and November 2019.

Case selection

I purposively selected three case studies: Amokwaw CREMA, Aowin CREMA, and Krokosua Hill CREMA, from the west of the high forest zone of Ghana. This area, which used to be the Western Region, a political unit, has more than half of all CREMAs in Ghana including five recently established. I selected cases to mimic the wide variety of CREMA in this area and used criteria such as the duration of existence, their current status - as active, dormant, or in revival, and their proximity to a protected area or a forest reserve. All the cases had similar land tenure arrangements and a similar major economic activity – cocoa farming. Amokwaw CREMA is the oldest CREMA, located next to a Protected Area and it is in revival after a period of dormancy. They are also in the south of the high forest zone with the most rainfall, and it is one of nine CREMAs in the Ankasa Resource Conservation Area. The second case study, Aowin CREMA is relatively new and it was established in 2018. It is located in the middle of the high forest zone and next to a production forest reserve where logging is allowed as well as community access to the reserve to collect forest products for domestic use. It is typical of the new CREMAs which have been established in this region. The last case Krokosua Hills CREMA is on the north end of the high forest zone, and situated between the Krokosua Hills Forest Reserve on one side and the Bia National Park on the

other. Its communities have no access to the national park but have access to collect non-timber forest products from the forest reserve. More recently a consortium of cocoa-buying companies and non-governmental organizations (NGOs) are working with them to reduce cocoa-driven deforestation, hence the CREMA has been revived to lead this effort.

Participant selection

I purposefully selected nine national-level key informants and four district-level informants, for their ability to contribute useful knowledge to the research (Richards and Morse 2013). All these key informants have been working on CREMA policy and with specific local-level CREMAs for many years. In each community, I distributed research participants into four focus groups: Community Resource Management Committee (CRMC), Men-in-CREMA, Women-in-CREMA, and non-CREMA members. Each focus group was between four and six participants. I created separate groups for men and women to ensure I interviewed women participants at their convenience. The non-CREMA focus group category: a mix of three men and three women, existed only in Aowin which had community members not considered part of the CREMA. I purposively selected research participants in Amokwaw and Krokosua for the three focus groups based on their status as indigenes or migrant farmers. Also, in Amokwaw and Krokosua Hills, I interviewed a section of the CREMA Executive Committee (CEC) as a focus group, but that was not possible in Aowin due to field difficulties. For each of the three communities in Aowin, a community meeting was convened by the CMRC where I explained the research purpose, process, and responded to questions about the research. I then randomly selected members that met the criteria for each of the focus group. I also interviewed community members recommended by the CRMC in each of the three case studies who were not part of the focus group but had insights about the CREMA to share.

Besides the interviews, I also observed one CREMA CEC meeting, two national-level CREMA policy meetings, and visited two farms in each CREMA case.

Data collection

I used a semi-structured interview guide to conduct the key expert interviews and focus group discussions. I conducted all the focus group discussions and community level interviews in the Akan language with my field assistant. To understand how CREMA empowered local communities, I asked the focus groups questions like 'what specific social, political, economic, and economic benefits have you seen in the community as a result of the CREMA? What do you like about the CREMA and how does that make you feel? What types of training opportunities have become available to you through the CREMA and how has that impacted the community?' Based on the responses I received, I asked follow-up questions to clarify the responses. I also asked national level participants about the impacts they have seen with CREMAs in the communities and at the national level. Furthermore, I also asked district and national level-participants about the political, social, economic, and psychological impacts of the CREMAs in their district and the challenges CREMAs pose to local people. My research assistant and a team of four translators translated and transcribed the focus group discussions. The interview guide is in Appendices B, C, and D.

Analysis

I used Scheyvens (1999) framework to set *a priori* codes namely political, social, economic and psychological impacts. For example, where research participants say that through the CREMA, they had come to access small loans to expand their farms and their businesses, I coded that as economic empowerment. For responses such as "the CREMA brought us trees to plant in our farms, and helped us register them," I assigned them to political empowerment and economic empowerment codes and to specific labels under those *a priori* codes. I also created two emergent primary codes – no benefit, and potential benefits, which indicated that the CREMA had no impact or that the outcomes are yet to be seen. In my second round of coding, I used emergent coding to assign child notes and such notes under each of the six broad categories. For example, categories like 'alternative livelihood,' which was under the primary code 'economic empowerment' had sub categories like 'employment,' and 'income from activity'. The codebook is attached in appendix G.

For disempowerment codes, I asked questions about the challenges and problems that the community faced as a result of the CREMA intervention and used emergent codes such as 'weak management,' 'short project cycle' and 'deference to public authorities' to code the responses. I went further in the second-cycle coding to organize these primary codes into broad categories such as 'capacity challenges,' 'external interference,' and 'policy and legal weaknesses,' and 'denied access,' and then regrouped these categories into the four main dimensions of the community empowerment framework. All through the coding process, I made annotations to codes to track my reasoning for assigning codes and categories.

Validity and reliability.

I spent two weeks living in each of the three CREMAs participating in communal activities such as education forums in Aowin, and soap making in Krokosua Hills, as an attempt at embedding myself. I debriefed with my research assistant after every day of discussions to identify emerging themes and reflect on the day's process. I asked for confirmation of responses from within the focus group to check for agreement and disagreements. I also triangulated some community-level responses with district-level participants to understand different perspectives. I documented my research process to create an audit trail and took reflexive notes during the field data generation and during the data analysis. A colleague also coded randomly selected transcripts using the codebook, and we discussed the coding differences to strengthen the reliability of the coding.

RESULTS

Across the cases examined, empowerment and disempowerment manifest in various ways and vary between communities and CREMAs. In this section, I present the findings from the case studies according to the four dimensions of empowerment and disempowerment of the community empowerment framework. I also contrast and compare the differences and similarities in empowerment among the cases.

Signs of political empowerment

Political empowerment manifests in three ways in the case studies examined. Firstly, local communities were aware of their exclusive access rights over lands and in some instances asserted this right through collective action. In all the cases, research participants emphasized that they could arrest any unsanctioned hunting, logging, or fishing in their area; hence they are emboldened to question suspicious persons. In Amokwaw and Aowin CREMAs, participants recounted instances when the community accosted illegal loggers on their lands and subsequently handed them over to the park authorities. In Aowin, a CRMC opposed and stopped an intended small-scale mining project in their community. Also, in all three CREMA cases, respondents reported that fear of arrest had reduced the incidence of forest infractions.

Secondly, a few CRMC members in logging communities in Aowin and Krokosua understood their community logging rights and led the community to engage with logging operators to obtain their benefit. A CRMC focus group in Krokosua mentioned that due to this awareness, loggers dealt with them as informed communities, unlike before. One such CRMC focus group, also in Krokosua Hills CREMA, which was starting to receive payments from a logging company, offered that:

"...before, the CREMA, timber contractors would show up and start logging, ...sometimes without even seeking our consent or introducing themselves to us, but through the CREMA, we now know that we have rights, that is giving consent before logging on my farm. We also know that we have some social benefits from logging and are entitled to compensation when we are affected by the logging operations. We also know that without our consent or adequate compensation, the logger cannot log on our farm to destroy our crops."

In both Aowin and Krokosua, rights-based forest NGOs, which supported these CREMA communities, had trained some CRMC officers to monitor forests and report infractions. Those trainees, with support of other CEC or CRMC members, used their acquired knowledge to leverage logging companies to collect the community's benefit.

Thirdly, CREMA communities demonstrated a good understanding of their property rights regarding planted trees, and most of them had registered these rights to secure

them. The CREMA intervention along with the extension services of the agriculture ministry encouraged farmers to plant indigenous timber tree species on their cocoa farmlands to shade their cocoa and improve their farms' biodiversity. In Aowin, tenant farmers equally saw the need to plant trees on their farms. This was unusual, as their primary focus was growing cocoa which generates quicker returns compared to tree planting which is a long-term investment. The uptake was reportedly high because most farmers had lost their cocoa farms to the droughts of the previous farming season; however migrant farmers could not cut down the dead cocoa trees without risking the termination of their land leases. Replanting cocoa trees triggered new land lease negotiations under less favorable terms. Such participants felt they may have avoided that if their farms had shade from planted trees. The CRMC and CEC officers also facilitated the distribution of tree seedlings and also mobilized farmers to register their planted trees in Amokwaw and Aowin. In all cases, research participants understood that a planted tree is a property right and could be sold as timber at maturation, subject to the Forestry Commission's approval.

Signs of political disempowerment

There were signs of political disempowerment across the cases. First, communities lost pre-existing access rights to forest reserves to gather forest products for domestic consumption after CREMAs were created. Research participants in Aowin and Krokosua explained that entering the forest reserve was a violation of the CREMA rule, although that is not explicitly stated in the CREMA constitution. For a community in Krokosua Hills CREMA, accessing the forest reserve attracted sanctions from the local chief court and prosecution by forestry authorities. This rule was to prevent farming in the Krokosua Forest Reserve which is under pressure from cocoa farming. However, some other research participants, particularly the women and non-CREMA focus groups felt this was not fair to the community because it denied them access and caused them to fear entering the forest. These participants also felt this rule discriminated against CREMA communities and favored the other non-CREMA communities that were illegally farming in parts of the forest reserve with no repercussions from forest authorities.

Another sign of political disempowerment was the community's dependence on external NGOs and donors to function and survive. When asked the question, "why did the CREMA go dormant?", multiple groups in Amokwaw and Krokosua Hills attributed it to the departure of the NGOs that started the CREMA and the inability of the district assembly and Park managers to carry on the work. Some national-level respondents suggested that initially paying transportation reimbursements and sitting allowances to CRMC and CEC members was ill-advised because it became the motivation for CEC and CRMC officials to attend CREMA meetings. This they argued was bad precedence and created a culture of dependence and reinforced the perception that the NGOs needed the CREMA compared to how much local communities need CREMAs. Park managers and CECs, knowing this financial burden and their inability to bear them, were therefore hesitant to call CRMC or CEC meetings in Amokwaw. A park manager explained this situation as follows:

"In those days, we used to pay them [CRMC and CEC members] sitting allowances and provided food for attending meetings. We saw very encouraging numbers at meetings, but since we ran out of funds, attendance has dropped. ...since the project ended, we have not seen them organize their own meeting."

CEC and CRMC members in all the cases, however, justified the necessity of these payments because they incurred costs in attending those meetings. In Krokosua, CEC and CRMC members appeared to have understood the project approach of NGOs and had learned to game the system and make gains before these NGO projects run out. Their years of interaction with NGOs in the community had taught them to expect short project cycles of NGO projects and their high demand for results. Some of these CREMA officers also knew that NGOs are not necessarily altruistic, hence they sought out their own interest just like the NGOs.

Closely related to dependence on NGOs is the problem of deferring to NGOs and government agents. Community people saw NGOs and government agents as more informed and usually accorded them a great deal of respect and deference. The hospitable attitude of local communities in Ghana partly explains this, but this is also a result of the 'power over' communities these external actors enjoy and the many years of local

community disempowerment. They therefore see opportunities of this nature as new and different. As a national key informant explained the deference problem:

There is also a lot of deference to state agencies, making them [CREMA communities] unable to question their authority, so these state agencies can do anything. ...anything states agencies say they [CREMA communities] think it is authoritative and should be complied with. They [CREMA communities] also don't know enough to ask relevant questions."

In all the cases, participants did not feel they had the capacity to challenge or demand accountability from the district assembly, the Forestry Commission, or park managers for their management of public resources because it was unusual for them. Some argued that the forest was for the State and the forestry authorities. The dependence and deference to NGOs and government agents have significantly weakened the survivability of CREMAs. It has also perpetuated the unequal power relations between rural communities on one part and government agencies and NGOs on the other.

Signs of social empowerment

In all the cases examined, communities and CREMA officers gained social capital. The CREMA facilitated access to networks, resources, and personalities, outside their community. In Aowin, NGOs, government agencies, donors, and researchers periodically visited and interacted with the core members and CREMA CEC and CRMCS, thus enhancing their social status. It also opened the opportunity for CRMC and CEC members to interact with national and district officials. In Amokwaw, the influence of the CEC Chairman won him a government grant to create a lands deeds register in the District, to document the land transactions between landowners and tenant farmers. Also, the presence of a CREMA in an area attracts NGOs and donor interventions, thus enhancing the visibility of such communities. Amokwaw and Krokosua CREMAs have seen interventions from NGOs, the Wildlife Division of the Forestry Commission, other government agencies, and even United Nations agencies since the creation of the CREMA.

Through CREMA intervention, some communities saw different infrastructural support. This included a community center and library, school supplies, and a connection to

the national grid in Amokwaw. In Aowin, the CREMA implementers built a new CREMA office with a water storage system. These projects were often executed as part of the CREMA intervention to address specific local challenges. Regardless, Amokwaw showed initiative and adaptability and converted a part of their CREMA community center into a clinic to attend to the health needs of all the CREMA communities. A community in Aowin also used the benefits obtained from a logger to complete a local clinic.

Besides infrastructure, another sign of social empowerment is the increase in conservation awareness among communities. Most national level stakeholders agreed that the most crucial impact of CREMA was conservation awareness among local people. In Aowin, a CRMC focus group shared their conservation awareness in these terms:

"...before, we did not consider the effects of our farming practices on the streams and rivers. We used to push weeds after we cleared farms into the streams, but we now know the linkages between the streams and our farms. We are now planting trees on our farms and nurturing naturally occurring ones. In the past, I didn't think that fishing with chemicals was a problem, but now I know the dangers it poses to our community and our people."

CEC members in Krokosua periodically attended community level meetings to explain environmental issues, encouraged farmers to plant and nurture trees on farms, and raised awareness about the closed season for hunting. Research participants partly attributed the reduced incidence of forest fires and other forest illegalities to the community education by CREMA leaders. Additionally, in all cases, there was a significant uptake in planting trees on farms and tree registration.

Furthermore, communities through CREMA have improved their sense of togetherness and had additional avenues for interaction among each other. Through CREMAs, communities discussed natural resource issues in their communities, shared experiences about stopping illegalities, and regularly shared updates about their CRMC. For research participants in Aowin, CREMA meetings had added a new dimension to improve their inter-community social interaction, besides market days and social events.

Signs of social disempowerment

The process for selecting community members to participate in schemes and events advantaged the privileged community members against others. Community participants in Amokwaw felt that CRMC only selected the same people for learning visits. Also, respondents in all the sampled communities in this case questioned the process for selecting beneficiaries for a fertilizer subsidy meant for farmers in the CREMA because some non-farmers benefited. Some also felt they were denied access to microloans for no tenable reason.

Furthermore, the CREMAs created a new category of community members in Aowin. Although their constitution recognized all residents as automatic members of the CREMA, only registered members participated in meetings of the CREMA. These registered members were referred to as core-CREMA members while non-registered members were not perceived to be members. Research participants in the non-CREMA focus group felt that registered members accumulated social capital and were the new forest 'police.' Core members also had CREMA-labeled polo shirts which made them distinctive whenever they wore them. CREMA members had been labelled as "the CREMA people." Some residents had not registered because they were not sure of the work of CREMA or personal gains from membership. Others claimed they could not afford the registration fee and the monthly dues. In Krokosua Hills, focus groups referred to the CRMC and CEC members as the 'CREMA members' and not themselves, even though all residents are members of the CREMA. In the case of a logging community in Krokosua Hills, only the CRMC knew the details of social agreements with the logging company, with the other groups unable to speak to the arrangement.

Signs of economic empowerment

All the cases examined had a livelihood investment to improve household incomes but most participants felt those outcomes were not tangible or immediate. For example, all communities had planted and registered trees in their cocoa farms but only spoke about the ecosystem services benefits it generated. Selling the trees for logging was their ultimate objective for planting them. Krokosua Hills CREMA and other communities in the Bia

Conservation Area are part of the Ghana Cocoa Forest Emission Program and the Emission Reduction Payment Agreement which is expected to generate 10 million tons in results-based carbon emission reductions in return for 50 million dollars in the next five years (World Bank, 2019). The benefit sharing plan for the agreement, however, does not intend to pay cash to farmers but will rather provide them with farming inputs (Forestry Commission 2020). Tree ownership also secured access to farmlands, an important asset, particularly for migrant farmers. Registered trees are also valuable property for farmers to access financial services, although no such service was available. As such, while many increased their assets, they had not seen any direct income from the trees.

Some communities took the initiative to start social enterprises and hoped for support from the State or NGOs through CREMAs to expand further. This was the case of one community in Aowin that had started a cooperative livestock farm to produce and sell to the community to generate income for the CRMC and its members. They were yet to be supported.

The introduction of alternative livelihood activities as part of CREMA interventions had mixed results. In the Krokosua Hills CREMA, producer groups for cocoa production, soap making, and palm oil production were still active and regularly produced goods such as locally-made soaps and palm oil, in spite of challenges with obsolete machinery. Also, a cocoa purchasing company supported the CREMA by starting a Village Savings and Loans Association (VSLA) for women. As a result of this, the women focus group mentioned that they had access to credit to expand their businesses, and to cover the educational needs of their children, unlike before. The VSLA had thus empowered women to empower their children. This VSLA was unique to this community and was absent in all the other cases. In Amokwaw, on the other hand, alternative livelihood interventions like fish farming, bee-keeping, soap making, and handicraft production which were started by the CREMA, had all collapsed. There were plans to start mushroom production, soap making, and honey production as alternative livelihood projects in Aowin.

Signs of economic disempowerment

A significant observation in all the cases is that there was no income from the CREMA; hence, members were unable to bear the cost of running the CREMA or raise revenue to invest in their resource management priorities. This made the CREMA work completely voluntary, where members had no assurance of any economic return, remuneration, or compensation for the time and resources spent on the CREMA. The financial burden of the CREMA was a common complaint of most research participants. As articulated by some CRMC members in Aowin:

"At the personal level, this is just volunteer work. We don't get paid for our efforts. Nothing comes to us directly. Social benefits from logging go to the community at large, and nothing stays with the CRMC. If there is a meeting to attend anywhere, it is our cost to incur, not the community. So, nothing comes to us directly. ...we have been assigned tasks to do, but we don't gain any reward or remuneration for it."

Also, in Aowin, the cost of utilities for the CREMA office was at the CEC and the CEC chairman's expense.

CREMAs did not create any opportunities for job placement or job creation. In Amokwaw, research participants felt community members should have been prioritized in the recruitment of park rangers and felt many more of their youth deserved to be recruited. In Krokosua Hills, some research participants felt their role in CREMA should have prioritized them during recruitments for forest guards, park rangers, or plantation hands, but this did not happen. The communities saw no benefits from tourism even though two of the cases were close to national parks. CREMAs therefore did not create any employment opportunities, although non-CREMA members in Aowin felt that the commitment and work of core-members needed to be remunerated.

Although planted trees were assets and could potentially provide benefits from carbon trading schemes, the Emission Reduction Payment Agreement ultimately undercut farmers from getting the benefits as envisioned in the Forest and Wildlife Policy, 2012. The Forest Policy seeks to return control of trees outside forest reserves and protected areas to local farmers: giving them both complete control and a greater share of benefits as expected in a devolved natural resource system. The agreement maintains the state

interests over the local and skews the ongoing policy deliberations to return tree tenure to local people. Farming inputs, the benefits from the agreement, limit the possible choices of farmers, compared to the flexibility that monetary compensation can provide.

Opportunities to acquire individual assets or to invest in individual or collective social and economic priorities consequently become limited.

Signs of psychological empowerment

CREMAs gave a feeling of importance to those closely associated with it, particularly its leaders, bringing respect and prestige to community members. CRMC and CEC members have gained the recognition of forestry officials or NGOs and that has psychologically empowered them to remain committed to the CREMA. Members of the CEC focus group in Amokwaw recounted:

"When we first established the CREMA, we were the shining example for others to look up to. We felt a great sense of pride, especially when we hosted visitors, even paramount chiefs from different parts of Ghana. They come to learn from us, how our CREMA worked.

CREMAs also generated among communities a sense of responsibility and duty to protect community resources for the community and posterity. In all cases, CRMC, CEC, and core members, felt they had a duty to protect natural resources for their children, leave a legacy for future generations, and work to reverse the fast depletion of species. In Amokwaw, participants recounted that at the start of the CREMA, it used to be common to find different species of monkeys in farms and regularly see animals like bushbuck and bush pigs, but these were hard to see anymore, hence the duty of the CREMA to bring restoration. Similarly, traditional authorities in Aowin mentioned that several local bushmeat delicacies had become rare; hence the expectation of the CREMA and its members to lead restoration efforts.

Lastly, CREMAs empowered communities and inspired them to share their cultural pride. This was a specific characteristic in one migrant community in Amokwaw, who formed a cultural dance group called the 'apatampa' to perform at the inauguration and when and wherever they were invited. Their performance re-enacted important customary

rites such as puberty and marriage rites and historical epochs such as war victories. For this community, their memory of the CREMA is their dance performance, which brought their community fame and respect. This caused other neighboring communities to start cultural dance performance groups to celebrate and share their culture.

Psychological disempowerment

CREMAs inadvertently created second-class residents, impacting the capacity and status of non-members. In Aowin, particularly non-members of the CREMA felt core-CREMA members were distinct from ordinary community members by virtue of their membership of the CREMA. They felt that core-members had become forest authorities and experts in the community and knew much more about forests than ordinary community members. For instance, a female core-member hired a chain-saw logger to fell a tree on her farm without authorization but avoided arrest from the forest guard partly because she was a CREMA member - something a non-member would have been penalized for.

Who was empowered?

CREMA communities are not homogeneous groups, but consist of many different social groups with different attributes; hence, empowerment outcomes are varied. CEC and CRMC officers in all the cases were the most empowered by CREMAs. These members consisted of both male and female indigenes and migrant farmers. Most CEC members were opinion leaders before becoming CRMC and CEC members, and thus gained additional social status and access to new social capital.

Also, the differences between core CREMA members and ordinary members in Aowin created a unique situation from the other cases. Core members, in this case, were better empowered compared to non-CREMA members. Core members, for instance, had decided on the livelihood options for a pending alternative livelihood project and had prioritized themselves for the training and start-up support ahead of the non-members. Their justification was that they had committed to the CREMA and had made sacrifices unlike, the rest.

In other cases, CREMA members had been equally empowered, but less than leadership because members had the prospect to benefit from learning opportunities provided through the CREMA. In a case, in Krokosua the community decided collectively on who represented them in external meetings. In cases where inviting organizations specified the number of female participants, the community selection usually followed that. When only CRMC members got selected, however, it created inequity. In Amokwaw, for instance, some members with closer ties to the CRMC were repeatedly selected for learning visits, and to benefit from micro loans at the expense of the others.

Women played varying roles in CRMCs and CECs of the cases examined; however, their empowerment was mixed and case-specific. There were fewer female members of the CEC and CRMC in all three cases. Also, female core-members of the CREMA in Aowin were more assertive than non-members on matters of use of the forest. Explaining the difference between members and non-members, a participant in a women focus group in Aowin offered.

"I can arrest anyone who flouts the laws, but they [non-members] don't have the power to do that. Also, we have learned, and we know the laws about the forest, but they [non-members] do not know.

These arrest powers applied mostly to water infractions and much less to forest infractions by illegal hunters or illegal loggers, for which the women felt incapable of enforcing.

CREMAs also created interesting opportunities for migrant and tenant farmers. Those that became active in the CREMA could become CEC and CRMC officers and thus gained access to social networks and greater recognition. Aowin CREMA had one such community. Its CRMC members were mostly migrant farmers, yet, despite their status, they prevented a small-scale mining operation from starting, even though the youth and several indigenes in the community favored the operation.

DISCUSSION

Three important emerging issues from the findings are examined in the next section. These are the conservation focus of empowerment, the role of facilitators, intermediaries, and the place of elites.

Empowerment for conservation

The strong CREMA emphasis on conservation minimizes the social and economic empowerment opportunities for local communities. CREMAs reported some conservation outcomes in all cases such as improved conservation awareness, a decline in illegal hunting and logging, reduced incidence of wildfires, and better uptake in tree integration into cocoa farms. However, community self-determination and changes in socio-political status of communities were less apparent. There were no significant changes in power dynamics between CREMA communities, district assemblies, and forest management agencies. Also, the conservation focus has had minimal impact on the incomes and economies of communities because community resources are under protection from exploitation. The more valued resources such as naturally occurring timber trees on farms as timber were still out of reach of CREMA communities.

CBNRM is about resource control and, therefore it is inherently political. Empowerment is also about asserting control, demonstrating individual and collective competence, changing the rules of the game, and improving power relations (Dongier et al., 2002; Perkins & Zimmerman, 1995; Rowlands, 1996) but these outcomes were not apparent in the cases. This is partly because CREMAs are set up to advance national conservation goals; hence the reluctance to build local capacity to assert resource control. Amokwaw and Krokosua CREMAs were established to support the protection of the respective national parks they bordered. The Aowin CREMA and four others were set up to provide a pathway for wildlife migration in the west of the high forest zone. Although resource protection was a mutual interest, increased local control was not. The conservation objectives appear to be of greater priority. The conservation orientation is also very prominent in the bylaws and CREMA constitutions, and they do not frame CREMAs as a mechanism to achieve sociopolitical transformation. Possibilities beyond were also not opened to any of the cases examined. The content of capacity building for CREMA communities emphasizes skills for administration of the CREMA and conservation (IUCN, 2017) with no focus on tactics for community organizing or capacity building on forest laws which have a greater connection to empowerment. This is, however, not unique to CREMAs in Ghana.

Forest administrators in India generally appeared resistant and not interested in alternative approaches to state-led forest decentralization that emphasized local community rights, and considered that as politically disruptive (Lele et al., 2010). Kumar, Singh, & Kerr, (2015), in another study of community forestry approaches in India, observed that state-led decentralization or CBNRM delivered on environmental outcomes, but perpetuated existing State-community power relations and failed to deliver on the rights awareness of forest communities. The study also concluded that the government's opposition to applying a rights-based approach was because they perceived that approach to be radical, socially transforming, and created opportunities for rural forest communities to challenge forest bureaucrats (Kumar, Singh, & Kerr, 2015). Johnson and Forsyth (2002), in their assessment of Thailand's Community Forestry Bill they observed that the rights-based approach strengthened community capacity to negotiate their rights with the State and defend mangroves from commercial shrimp farmers in Thai courts, despite the bias of the State against this approach. They concluded that that assertion of rights is dependent on the ability of communities to challenge the political system and others who try to undermine their rights (Johnson & Forsyth, 2002).

In CREMAs, the focus is primarily on conservation rather than rights or fundamental normative questions about the rationale for fortress conservation, or local communities' abilities to decide use and benefits from resources. Also, the many years of centralized control by governments in Ghana and the exclusion of local people from forest management have internalized within local communities, the perception that forests belong to the State and not them. CREMAs in the cases examined were not breaking down these long-held but false perceptions. It would take more than a conservation agenda to reverse this systemic marginalization and poverty of rural forest communities for them to assert real control and change power relations with state institutions.

To enhance political empowerment, CREMA communities could be empowered through a stronger focus on rights and skills to mobilize and advance community goals. NGOs, academia, and informed citizens could be critical allies to communities (Johnson & Forsyth, 2002). They can be further supported to engage with other district-level forest

actors to influence forest decision making at the district. CREMAs would then be able to share learning across scales to influence higher-level forest decision making. This will then make community participation in forest decision making meaningful and impactful and as intended by forest decentralization (Agrawal & Gibson, 1999; Berkes, 2010). Framing CREMAs in a rights-based approach has the potential for realizing human development and community vision (Lele et al., 2010). This gap points to the importance of rights-based approaches and a role for rights-based NGOs to support CREMA communities towards more informed engagement in meeting conservation and development priorities.

Besides the limited political empowerment, the conservation focus of CREMAs is detracting from economic empowerment. In all the cases examined, local resource use was restricted but for allocating hunting quotas. Furthermore, communities had no access to lucrative resources, particularly timber, even though they had nurtured these trees for many years, thus limiting their income options. Similar instances in Uganda and Zambia suggest that limited or no control over valuable resources is not uncommon in CBNRM (Measham & Lumbasi, 2013). But transferring control over lucrative resources is also by itself not economically empowering or incentivizing if it does not dismantle the drivers of marginalization and exclusion (Allison et al., 2012). Other studies on CREMAs similarly concluded that CREMAs fared poorly in improving the livelihoods of communities (Baruah et al., 2016; Murray et al., 2018). Incentivizing communities would require the holistic transfer of resource control, healthy forest, protection of resource rights by law, and supportive external actors (Agrawal, 2007; Arts & de Koning, 2017). In the case of CREMAs however, there is no control over high-value resources or a built-in rationale in CREMAs to economically empower communities. Conservation projects try to balance community development objectives by introducing alternative livelihood projects (Wright et al., 2016), but as seen in these cases, it has had a mixed effect.

Alternative livelihood schemes seek to replace or reduce actions considered environmentally damaging, or compensate for the loss of economic options, or incentivize new income opportunities in conservation projects (Wright et al., 2016). However, these alternative schemes are unsuccessful in many instances (Roe, 2008). Wright et al., (2016)

suggest three reasons for their failure. Firstly, the community is assumed to be homogeneous and does not disaggregate the diverse impacts of conservation on different social groups. Secondly, new substitutional livelihoods become additional and more destructive when they do not match previous activity, fueling resource destruction. Lastly, some interventions are not scalable to reach the entire community as projected. In the case of CREMAs, communities are similarly treated as homogeneous without targeting the most vulnerable groups. Such a challenge is seen in Amokwaw where non-farmers benefited from a fertilizer subsidy. Additionally, the poor integration of products into both the local community and external markets weakens the survivability and scalability of these alternative livelihood ventures. Also, constant rainfall in Amokwaw made it difficult to produce honey. Also, substituting fish for bushmeat through fish-farming in Amokwaw failed because residents preferred freely available bushmeat to fish that they had to buy. Focusing alternative livelihood schemes on core-members in Aowin, without a careful analysis of the disaggregated impact of restricted access and careful analysis of the potential for empowerment, presents many problems for the future, especially when everyone suffers differently from the restricted access to resources.

It is essential for better innovation in alternative livelihood schemes for them to become a viable option in CREMAs. Most community-based forestry models allow for the use and development of the resource (Schusser et al., 2014). The appropriate intervention should target the relevant social groups and be backed by intense product research to ensure product marketability and movement. Environmental payments-based programs could provide viable options, but Lele et al., (2010) advise against prioritizing economic gain and technicalities over property rights. In the face of the overwhelming emphasis on protection, CREMAs have yet to realize the potential for economic empowerment.

Role of external actors

External actors such as NGOs, donors, local governments, academia, and the private sector play an essential role in CBNRM and driving forest decentralization. These roles include mediating divergent views, moderating power relations between government and local people, working on behalf of the government, supporting financial and technical

capacity, and starting CBNRM (Johnson & Forsyth, 2002; Shackleton et al., 2002). In all the three cases, NGOs played crucial roles in starting and sustaining the CREMAs, until they left, which resulted in the dormancy of the CREMA. In this sense, CREMAs are propped up solely by NGO and external support, thus limiting their potential for empowerment and community ownership. This calls for different intervention approaches to improve ownership, sustainability, and empowerment.

Arts and de Koning (2017), in their review of ten community forestry schemes, suggest roles for external agents. They see a need for a community of practice: extensive networking among internal and external actors based on social learning, mutual trust, and common concerns for the benefit of CBNRM, to guarantee their success (Arts & de Koning, 2017). Shackleton et al., (2002) suggests that NGOs particularly should shift their focus from technical decision making to building capacity for political mobilization, communication, market access, and building democratic institutions for resource management. In the examined cases, NGOs mostly played roles similar to the Wildlife Division, focusing on conservation, gave little attention to economic capacity, and no interest in political mobilization. A national NGO respondent indicated a different approach to CREMA in a different part of Ghana which emphasized building the legal and rights capacity for communities and then facilitating a community-driven strategy to achieve their vision and priority, rather than setting a conservation agenda for the community. The CREMA had gone on to use their numbers and reach to elect one of their members as their representative to the district assembly. This shows that alternate approaches to CREMA formation are already in existence.

Contrary to popular perceptions, NGOs are not homogenous but varied in focus, orientation, and objectives and range from service delivery NGOs to conservation NGOs and human rights NGOs (Vakil, 1997). More importantly, rights-based NGOs could have a more significant role in CREMAs through building capacity to demand and defend community rights and facilitating the mobilization and interaction of CREMAs across districts and scales into a collective unified voice. Already, rights-based NGOs continue to build communities' capacity, to demand rights from government and loggers and monitor local forest

illegalities. This could be expanded to CREMA communities. Interventions by NGOs and other external actors have on the other hand been found to have exacerbated conflicts between the government and local communities, retained the learning and benefits within the organization, and failed to properly transfer capacity to local people (Hajjar, Kozak, & Innes, 2012; Oyono, Biyong, & Samba, 2012). However, the literature suggests that gaining awareness about rights and skills to mobilize to advance those rights are the building blocks for building individual and community confidence to pursue other development priorities.

District assemblies are important actors in resource management and development planning in Ghana, however, their lack of support and sometimes ineffective engagement in CREMAs is a lost opportunity for community empowerment. Although district assemblies in logging areas especially receive substantial timber royalties, they spend most of it on administrative costs and less on development or investment into environment protection like CREMAs (Mawutor & Young, 2017). The continued centralized control of forests weakens district assembly capacity and the possibility of asserting control over forests (Sasu, 2005; Teye, 2011). But if district assemblies were to support CREMAs after NGOs and wildlife officials step out they could ensure the continued functioning, learning, and survivability of the CREMAs over time.

The place of elites

It is typical for elites in community-based resource management schemes to maximize their social capital and to obtain other capitals -political and economic, for themselves (Ramón-Hidalgo et al., 2018). Other studies on CREMAs have concluded that the legal and administrative structure of CREMAs facilitate the formation of elites and helps to consolidate power and social capital at the expense of members (Baruah, 2017; Zulu, 2008). Usually, community members who can make time, and are passionate about their community get involved in community programs and become the elites, hence it is important that community-focused programs use a variety of participatory mechanisms to foster popular participation (Laverack & Wallerstein 2001). The creation of core-members in Aowin is such an example of elite formation. On the other hand, CREMA elites bore some

CREMA costs, thus making leadership an unattractive financial headache and limited to only a few. Elites are however more amenable to bearing such cost when their interests align with the communities and when facilitating collective action inures to their own benefit (Vedeld, 2000).

CONCLUSIONS

In this paper, I sought to examine how decentralized powers from the government to CREMAs impacted their empowerment using the community empowerment framework (Scheyvens, 1999). This framework provides a useful approach to exploring different dimensions of the impacts of CREMAs. Findings from the cases showed the presence of all the four dimensions of empowerment albeit to varying extents across and within cases. CREMA communities are politically empowered to the extent that they are aware of their tenure rights over-planted trees; are aware and can enforce their exclusionary access to their area, and can exercise collective action to prevent logging and mining. On the other hand, CREMA restricts pre-existing access rights to forest reserves and exacerbates dependence and deference to external actors, thus disempowering communities politically. Socially, CREMAs come to acquire social capital, strengthen bonds with neighboring communities, and sometimes innovatively address social infrastructural needs. Regardless, inequity in benefit-sharing, and the emergence of a new social class privileged those actively engaged in the CREMA over ordinary residents. CREMAs have the potential to generate ecosystem services but it did not appear that there was any scheme in Ghana currently paying for ecosystem services. The inability of CREMAs to raise income from resource utilization limited the possibility for economic empowerment.

Social groups in CREMA communities experienced empowerment differently, with elites and core members standing a better chance to gain social capital, social status, and opportunity for livelihood training. Some migrant farmers by virtue of their association with CREMAs also enhanced their status. It is also evident that these elites who benefited most from CREMA also spent the most on CREMAs, paid dues, volunteered time and effort, and paid some costs associated with the CREMA.

From the analysis it is evident that CREMAs are designed to deliver on conservation outcomes, hence opportunities for political, and economic empowerment are very limited. CREMAs also do not expand community capacity to influence decisions or facilitate collective action to reverse the inequitable power relations between government institutions and its agents and communities or their power over local communities. Similarly, the focus on alternative livelihoods has not always been successful due to lack of integration of local communities into markets, problematic choices of alternative livelihoods, and the sometimes weaknesses in targeting beneficiaries. The lack of interest of district assemblies and their lack of investment into CREMA also limits the possibility of CREMAs to be functional and effective after they are established. These findings point to the need for a critical look at the approaches to CREMA establishment and a redefinition of the role of external actors in CREMA to realize community empowerment beyond conservation outcomes. The findings also suggest the need for a critical look at what constitutes community participation in natural resource governance. The issue of participation of local communities in forest decentralization needs further interrogation to understand how CBNRM influences resource decision-making at the national level. CREMAs have the potential to empower rural communities. Current approaches could be further deepened to move CREMA and forest communities beyond conservation to realize significant livelihood improvements and impactful influence in local and national decision making. The role of NGOs and external actors in CREMAs and how they contribute to community resource governance and self-determination is also worth examining to improve the community of practice of NGOs.

Lastly, it is important to further examine approaches to expand Scheyven's (1999) community empowerment framework to also enhance its potential to examine community empowerment processes at the individual and organizational levels, to strengthen its macro analysis of the community.

CHAPTER 4: OVERALL CONCLUSIONS

This thesis examined CREMAs in Ghana and the outcomes they produce, with a particular focus on the western part of the high forest zone. This zone hosts the highest number of CREMAs in Ghana. CREMAs in this zone form a crucial part of a national strategy to reduce forest degradation and deforestation. The thesis posed the question: to what extent are CREMAs decentralizing power to empower local communities to enhance local forest governance? I also raised two specific sub-questions to answer the driving research question: to what extent are CREMAs decentralizing resource powers to local communities; and, to what extent are the devolved powers to CREMAs contributing to community empowerment? The findings were based on empirical data collection from three CREMA cases, 34 focus group discussions, key expert interviews, and content analysis of CREMA constitutions and district assembly bylaw.

In the first chapter, responding to the question: to what extent are CREMAs decentralizing resource powers to local communities, I used the powers component of the actors, powers, and accountability framework (Agrawal & Ribot, 1999) for assessing decentralization systems to analyze the cases. The findings show that the government decentralizes a range of powers to CREMAs but the most prominent of the powers transferred and exercised are law enforcement powers to enforce restrictions on accessing and using local forest and wildlife resources. The findings also show that contrary to the claim that CREMAs have devolved powers over natural resources, they only have some powers over wildlife hunting. Resources in CREMA, including timber and minerals, are still subject to external allocations by the Forestry Commission, thus undermining any local control.

The findings from the first paper suggest three things. Firstly, the Forestry Commission, through CREMAs, passes on responsibility for enforcing restrictions rather than use rights and real decision-making powers to local communities. This increased central government control of resources and protected areas, and satisfied external rather than local community objectives for resources. Secondly, the claims of devolution of

management authority to local communities is problematic because forest administration remains highly centralized and natural resources management is outside the decentralization process. Also, the lack of willingness of the central government to yield control over off-reserve areas is antithetical to decentralization (Acheampong & Marfo, 2011; Hansen, Rutt, & Acheampong, 2018). Lastly, CREMAs are creating a duality of management responsibility for resources. This is because CREMAs create parallel governance structures that sometimes strengthen or enervate traditional authorities.

The second paper focused on the extent to which CREMAs contribute to community empowerment. The findings from the analysis indicate that CREMAs focus on conservation outcomes and deliver poorly on political and economic empowerment. Although there was some evidence of political empowerment, this mostly related to conservation. A broader awareness and assertion of rights to fully control resources, influence forest decision making and reverse the power imbalance between the State and local communities were absent in the cases. Similarly, economic empowerment was lacking in the cases, and alternative livelihood projects to improve livelihoods and incomes had a mixed effect. Through CREMAs, communities had expanded their livelihood assets, particularly the ownership of planted trees, but there were no emerging present tangible benefits. The inequity in knowledge, power, and economic wealth which has contributed to the vulnerability and disempowerment of local communities were all untouched in CREMA interventions.

Limitations

The purposively selected sample size of three CREMAs is small relative to the number of CREMAs in the region, limiting generalizability. While it is generally difficult to generalize from case studies, the findings of this thesis are likely to be broadly applicable to CREMAs in the southern and transitional zones of Ghana. This is because most of their conditions are similar to the three cases examined in terms of approach to the establishment of the CREMA, the framing of the CREMA constitutions, the framing of the bylaws, and the absence of a large communally managed area that can generate income for the community. Findings are less likely applicable to CREMAs in the northern parts of

Ghana, which have communally shared spaces and are better able to exercise hunting rights and other withdrawal rights to use thatch, collect kola nuts, shea nuts, and to harvest medicinal plants for income. Because of their documented achievements in developing their ecotourism potential, generating revenue from hunting quotas, and selling thatch, they are likely to show greater economic empowerment outcomes and much less political empowerment. However, these communities in the northern part of Ghana are equally dependent on NGOs and external actors for direction and are poorer compared to southern parts of Ghana. CREMAs in the mid and southern parts of Ghana are mostly a collection of individual farmlands and fallow lands; hence centralized decision making over private lands at the local level is more challenging.

Time was a major constraint in this work. Working in eleven communities is quite difficult for the short duration of a master's thesis fieldwork. Moreover, the time of field data collection coincided with the late cocoa harvesting season, making community meetings difficult to schedule. A more effective approach for such a small window of data collection could have been to reduce the number of cases and increase the number of communities and categories of focus groups in order to gain in-depth local perspectives of CREMA decentralization and empowerment. Conducting the fieldwork after the planting season would have been less demanding on research participants. While this would have further sacrificed generalizability, it could have produced a more complete picture of the individual case studies.

In this study, I was both an outsider and an insider to the communities studied. I sought to understand the experiences of people living in CREMAs and as a non-resident and non-speaker of the local dialects I was an outsider. However, by working with a research assistant who knew the local dialects in two of the cases and was native to one case studies, using the Akan language, and framing questions using pronouns such 'us', 'our' and 'we', I tried to gain an insider perspective to gain a deeper understanding of the reality of CREMAs among research participants. As a researcher and a student studying outside Ghana, I started from a position of power, but I shared my motivation for work to show how my work was rooted in improving community rights. I also highlighted to them their crucial role

in shaping the outcome of this thesis. Also, living for two weeks in each case study, sometimes in local housing, and participating in local community events such as a basic education forum of pupils in Aowin and farm visits, helped me to embed in the people.

Unlike the participatory approach to study participants selection in Aowin, I was mostly dependent on the CRMC chairman to recruit participants into the focus groups in Amokwaw and Krokosua Hills, thus raising the possibility of selection bias. Speaking to other knowledgeable individuals in the community and informal discussions with farmers during farm visits also provided some useful perspective outside the focus groups.

In a focus group, there is potential for social desirability bias, hence I was mindful in providing a safe space for open discussions. Also, local communities are sometimes known to over exaggerate situations and experiences to prove a case for their assistance to an outsider, hence I was mindful of the potential for such extreme descriptions. As often as possible, I used probing questions, requested examples, and framed the same question in different ways to understand research participants and to see the consistency of response. I also sometimes directed questions away from very vocal research participants who tried to dominate the focus group. Moreover, I gave the option to any participant to reach out to me during my period of study to further discuss any of the issues thought too sensitive to discuss in a group.

There were minor limitations to the document content analysis. This study only used the summarized version of the Amokwaw CREMA constitution and did not use its district assembly bylaw because it was not available, however looking at the Aowin and Krokosua Hills bylaws which are exact replicas, it is highly unlikely that there are significant differences. I also did not examine the CREMA provisions in the Wildlife Resources Management Bill, which is intended to give higher legal recognition to CREMAs. The legislative process has stalled, and its provision is still subject to additional changes.

Lastly, the findings of this thesis are largely influenced by my perspective as a critical researcher and a long-time campaigner for community natural resource rights. I tried, however, to approach it with an open mind and looked out for different perspectives for and against community rights.

Implications of the study

This paper presents a political framing of CREMAs and its outcomes which is a novel approach to assessing CREMAs. This work, therefore, generates findings that speak to deep political issues in CREMA which are often ignored in practice and in literature.

This thesis points to five implications for CREMA Policy in Ghana. I come to these implications with the perspective that a rights-based approach to conservation centers community rights and local resource control leading to empowerment (Johnson & Forsyth 2002a). Firstly, the findings of this study point to the need for reforms in the approaches to establishing CREMAS in Ghana. The current approach which prioritizes conservation is not configured to realize the economic and political empowerment of disadvantaged and poor rural communities. Conservation could be the outcome of political and economic empowerment and the informed decision that communities arrive at after they have examined the various options, opportunities, and rights they have. Without such a bottom-up informed approach from communities, local ownership will continue to lack and CREMAs will continue to follow the pattern of going dormant after NGOs and government agencies pull out support. Also, CREMAs need to be appropriately considered as political reengineering processes to help tackle fundamental normative questions about the role and power of the local community in resource use and the obligation of state agencies to resource owners. In this way, communities can meaningfully engage as informed social groups with different state agencies in the governance of local resources.

Secondly, NGOs need to take the first step towards deploying rights-based approaches to CREMA establishment and support rather than the Wildlife Division of the Forestry Commission or any state agency. This is because state agencies, as seen in other cases, are not always comfortable with the legitimate demands from well informed and empowered communities, (Kumar, Singh, & Kerr, 2015; Lele et al., 2010). Drawing from other examples this can be done by restructuring capacity building in CREMA communities to focus on community rights, identification of community problems, particularly natural resource problems, and collective action planning and mobilizing to address those challenges (Johnson & Forsyth 2002b; Lele et al., 2010). NGOs also could play the important

role of intervening on behalf of communities when conflicts emerge in their relationship with the State. NGOs are also critical to ensuring that state institutions have the awareness to respond to legitimate rights demands from resource owners, resource dependents and forest communities by raising awareness and through advocacy. Additionally, NGOs and other external factors including district assemblies, the Forestry Commission, and interested donors need to become a community of practice: a network of close interaction, learning, and refinement of practice, that supports local communities, technically and financially, to realize their natural resource rights because that is fundamental to the success of CBNRM (Arts & de Koning, 2017). In this community of practice, the community interest and rights need to be the central focus rather than the conservation objectives of NGOs or the State.

Thirdly, CREMAs need to have real local control over resources and not just hunting rights. It is only when communities have real control over the trees that they nurture and other such important resources that they can begin to see real benefits from the CREMA. The forest decentralization policy over natural resources is ambiguous and does not decentralize any control away from the Forestry Commission to local people (Sasu 2005; Teye, 2011). This brings to the fore the old debate about the vision for natural resource and forest decentralization in Ghana. CREMAs cannot be an effective form of decentralization when forests are centralized in a hierarchical and centralized Forestry Commission. It is only when power shifts from the Forestry Commission that the use of the phrase “devolution of management authority over natural resources to local communities,” often associated with CREMAs (Forestry Commission, 2004a) can be meaningful. Such a phrase also only makes sense when local communities and district assemblies control and decide management priorities for forest reserves and national parks in their jurisdiction.

Additionally, this research has implications for approaches to the economic empowerment of local people. The current approaches which use alternative livelihoods projects as a way of meeting the development gaps in CREMAs could be better streamlined. In the first place, the dominant fortress conservation paradigm which underlies alternative livelihoods approaches (including in CREMAs) needs to give way to more modern approaches emphasizing the rights of the community (Wright et al. 2016). The objective of

CREMAs should fundamentally empower local communities not necessarily to depend less on resources but to derive more benefit from sustainable use. In this sense, there is the need for greater investment in local forest enterprises, and integration of those products and services into markets, both local and international to ensure wealth creation in these communities.

Lastly, CREMAs need to move away from their current state as islands of community conservation to cross-scale community movements protecting forests to improve local livelihoods. Drawing from the example of fire learning collaboratives in United States, CREMAs could build multi-scalar networks across districts and regions for shared learning, collaboration, innovation, and coordination of their efforts (Goldstein & Butler, 2010). Networks at that scale could thus improve the practices of CREMAs, build solidarity, and bring CREMAs to a stronger influence in managing natural resources. The current efforts in Juaboso-Bia Conservation Area, where several CREMAs are joining efforts to create a management board over the large landscape (Forestry Commission, 2018) provides a start of such cross-learning. However, the strength of a multi-scalar network of this nature is in landscape-level actions and decision making, informed by regional learning and collaborative planning, and national level information sharing and communication (Goldstein & Butler, 2010). A bureaucratic hierarchy concentrating decision making at higher levels of collaboration, therefore, becomes too rigid and undermines the essence of a strong community-based collaborative movement.

Areas for further study

As an exploratory study, this thesis points to other areas that could be further studied to improve our understanding of CBNRM, assessment approaches, and practical outcomes of CREMAs. Firstly, there is the need for research into natural resource decentralization in Ghana and its implications for forest decentralization, looking at the roles of natural resource agencies such as the Forestry Commission, Minerals Commission, and district assemblies. A study of this nature will inform policy about how a holistic transfer of natural resource rights, not just forest rights to communities and districts, would look like for communities and these different state agencies. Secondly, there is the need to

examine the effectiveness of rights-based approaches to community empowerment in forest fringe communities which have been supported by rights-based NGOs to identify lessons and challenges to inform the implementation of rights-based approaches in CREMA. Critical questions that need to be addressed would include the processes and outcomes of political empowerment, and the role of the State, district assembly, and other external actors in the new configuration of power relations. Future studies could also examine the process of community empowerment through CREMAs at the individual, organizational and community-level in order to better understand the links between these levels and how they can be strengthened to realize community empowerment.

References

- Acheampong, Emmanuel, and Emmanuel Marfo. 2011. "The Impact of Tree Tenure and Access on Chainsaw Milling in Ghana." *Ghana Journal of Forestry* 27: 68–86.
- Agrawal, Arun. 2001. "Common Property Institutions and Sustainable Governance of Resources." *World Development* 29(10): 1649–72.
- . 2007. "Forests, Governance, and Sustainability: Common Property Theory and Its Contributions." *International Journal of the Commons* 1(1): 111.
<https://www.thecommonsjournal.org/article/10.18352/ijc.10/>.
- Agrawal, Arun, and Clark C. Gibson. 1999. "Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation." *World Development* 27(4): 629–49.
- Agrawal, Arun, and Krishna Gupta. 2005. "Decentralization and Participation: The Governance of Common Pool Resources in Nepal's Terai." *World Development* 33(7): 1101–14.
- Agrawal, Arun, and Jesse C. Ribot. 1999. "Accountability in Decentralization: A Framework with South Asian and West African Cases." *Journal of Developing Areas* 33(4): 473–502.
- Agyare, Andrew Kyei, Grant Murray, Philip Dearden, and Richard Rollins. 2015. "Conservation in Context: Variability in Desired and Perceived Outcomes of Community Based Natural Resources Governance in Ghana." *Society and Natural Resources* 28(9): 975–94.
<http://dx.doi.org/10.1080/08941920.2015.1042127>.
- Allison, Edward H. et al. 2012. "Rights-Based Fisheries Governance: From Fishing Rights to Human Rights." *Fish and Fisheries* 13(1): 14–29.
- Anstey, Simon. 2009. "INSTITUTIONAL CHANGE AND COMMUNITY BASED NATURAL RESOURCE MANAGEMENT IN NORTHERN Mozambique. The Village Goes Forward : Governance and Natural Resources in North Niassa." (May): 339.
- Arts, Bas, and Jessica de Koning. 2017. "Community Forest Management: An Assessment and Explanation of Its Performance Through QCA." *World Development* 96: 315–25.
<http://dx.doi.org/10.1016/j.worlddev.2017.03.014>.
- Asare, Rebecca A., Andrew Kyei, and John J. Mason. 2013. "The Community Resource Management Area Mechanism: A Strategy to Manage African Forest Resources for REDD+." *Philosophical Transactions of the Royal Society B: Biological Sciences* 368(1625).
- Awortwi, Nicholas. 2011. "An Unbreakable Path? A Comparative Study of Decentralization and Local Government Development Trajectories in Ghana and Uganda." *International Review of Administrative Sciences* 77(2): 347–77.
- Babbie, Earl R. 2014. *The Basics of Social Research*. Sixth edit. Belmont, Calif.: Belmont, Calif. : Wadsworth, Cengage Learning.
- Baker, Dana M., Grant Murray, and Andrew Kyei Agyare. 2018. "Governance and the Making and Breaking of Social-Ecological Traps." *Ecology and Society* 23(1).
- Baral, Srijana et al. 2018. "Politics of Getting the Numbers Right: Community Forest Inventory of Nepal." *Forest Policy and Economics* 91(February 2017): 19–26.
<https://doi.org/10.1016/j.forpol.2017.10.007>.
- Baruah, Manali. 2013. *Privatization in Guise of Decentralization in a Collaborative Resource Management Initiative : A Case of CREMAs from Ghana*.
- . 2015. "Effect of Institutional Choices on Representation in a Community Resource Management Area in Ghana." <https://portals.iucn.org/library/node/45941>.
- . 2017. "Facipulation and Elite Formation: Community Resource Management in

- Southwestern Ghana." *Conservation and Society* 15(4): 371–84.
- Baruah, Manali, S. Bobtoya, P. Mbile, and G. Walters. 2016. "Governance of Restoration and Institutions: Working with Ghana's Community Resource Management Areas." *World Development Perspectives* 3: 38–41. <http://dx.doi.org/10.1016/j.wdp.2016.11.008>.
- Bawole, Justice Nyigmah. 2017. "Pro-Poor Decentralization in Ghana: Exploring the Facilitators and the Limitations." *Administrative Theory & Praxis* 39(2): 122–39.
- Bempah, Godfred, Kwaku Brako Dakwa, and Kweku Ansah Monney. 2019. "Evaluation of the Community Resources Management Area (CREMA) Programme around Ankasa Conservation Area, Ghana." *Cogent Environmental Science* 5(1): 1–13. <https://www.cogentoa.com/article/10.1080/23311843.2019.1592064>.
- Béné, Christophe et al. 2009. "Power Struggle, Dispute and Alliance Over Local Resources: Analyzing 'Democratic' Decentralization of Natural Resources through the Lenses of Africa Inland Fisheries." *World Development* 37(12): 1935–50.
- Bene, Christophe, and Arthur Neiland. 2004. "Empowerment Reform, Yes . . . but Empowerment of Whom? Fisheries Decentralization Reforms in Developing Countries: A Critical Assessment with Specific Reference to Poverty Reduction." *Aquatic Resources, Culture and Development* 1(1): 1–16.
- Benjaminsen, Tor A., and Hanne Svarstad. 2010. "The Death of an Elephant: Conservation Discourses versus Practices in Africa." *Forum for Development Studies* 37(3): 385–408.
- Berkes, Fikret. 2010. "Devolution of Environment and Resources Governance: Trends and Future." *Environmental Conservation* 37(4): 489–500.
- Brockington, Daniel, and James Igoe. 2006. "Eviction for Conservation." *Conservation and Society* 4(3): 424–70.
- Chinangwa, Linda, Fergus Sinclair, Andrew S. Pullin, and Neal Hockley. 2016. "Can Co-Management of Government Forest Reserves Achieve Devolution? Evidence from Malawi." *Forests Trees and Livelihoods* 25(1): 41–58.
- Client Earth. 2013. "Ownership and Use Rights of Forest Natural Resources." (November).
- Coleman, Eric A., and Forrest D. Fleischman. 2012. "Comparing Forest Decentralization and Local Institutional Change in Bolivia, Kenya, Mexico, and Uganda." *World Development* 40(4): 836–49. <http://dx.doi.org/10.1016/j.worlddev.2011.09.008>.
- Corrêa Cavalieri, Irene, and Helena Neves Almeida. 2018. "Power, Empowerment and Social Participation- the Building of a Conceptual Model." *European Journal of Social Science Education and Research* 5(1): 174–85.
- Cousins, Ben. 1997. "How Do Rights Become Real? Formal and Informal Institutional in South Africa's Land Reform." *IDS Bulletin* 28(4): 59–68.
- Creswell, J. 2014. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks CA: Sage Publications.
- Cronkleton, Peter, Sushil Saigal, and JuanM Pulhin. 2012. "Co-Management in Community Forestry: How the Partial Devolution of Management Rights Creates Challenges for Forest Communities." *Conservation and Society* 10(2): 91. <http://www.conservationandsociety.org/text.asp?2012/10/2/91/97481>.
- Dahl, Robert A. 1957. "The Concept of Power." *Behavioral Science* 3(2): 201–15.
- Debrah, Emmanuel. 2014. "The Politics of Decentralization in Ghana's Fourth Republic." *African Studies Review* 57(1): 49–69.

- Dongier, Philippe et al. 2002. "Community-Driven Development." In *A Sourcebook for Poverty Reduction Strategies, Vol. 1*, ed. J. Klugman. World Bank, Washington DC.
- Dressler, Wolfram et al. 2010. "From Hope to Crisis and Back Again? A Critical History of the Global CBNRM Narrative." *Environmental Conservation* 37(1): 5–15.
- Duguma, Lalisa A. et al. 2018. "Community Forestry Frameworks in Sub-Saharan Africa and the Impact on Sustainable Development." *Ecology and Society* 23(4).
- Forestry Commission. 2000a. "Ankasa Conservation Area Management Plan."
- . 2000b. "Wildlife Division Policy for Collaborative Community Based Wildlife Management."
- . 2004a. "A Brief Guide to Establishment of Community Resource Management Area (CREMA)." *A User Manual*. <http://dx.doi.org/10.1016/j.tws.2012.02.007>.
- . 2004b. "A Briefing Document on Collaborative Resource Management in Ghana." http://www.fcghana.com/publications/wildlife_issues/collab_resource_mgt_briefing.pdf.
- . 2016. "Ghana REDD + Strategy." : 101. [https://www.fcghana.org/userfiles/files/REDD%2B/Ghana REDD%2B Strategy.pdf](https://www.fcghana.org/userfiles/files/REDD%2B/Ghana%20REDD%20Strategy.pdf).
- . 2018. *GHANA COCOA FOREST REDD + EMISSIONS REDUCTION (ER) PROGRAM ME: Environmental and Social Management Framework (ESMF)*. Accra. www.fcghana.org/nrs.
- . 2020. *Advanced Draft Benefit Sharing Plan Ghana Cocoa Forest REDD + Programme*. Accra. [https://www.fcghana.org/userfiles/files/Final BSP_Ghana_March 2020\(1\).pdf](https://www.fcghana.org/userfiles/files/Final%20BSP_Ghana_March%202020(1).pdf).
- . "The Wildlife Division." <https://www.fcghana.org/page.php?page=46§ion=22&typ=1&subs=254>.
- Ganle, John Kuumuori, Kwadwo Afriyie, and Alexander Yao Segbefia. 2015. "Microcredit: Empowerment and Disempowerment of Rural Women in Ghana." *World Development* 66: 335–45. <http://dx.doi.org/10.1016/j.worlddev.2014.08.027>.
- Giessen, L. et al. 2016. "Decentralisation Policy as Recentralisation Strategy: Forest Management Units and Community Forestry in Indonesia." *International Forestry Review* 18(1): 78–95.
- Gilmour, Don. 2016. *Forty Years of Community-Based Forestry*. Rome.
- GoG. 1992. *Constitution of the Republic of Ghana*. Ghana. <https://www.constituteproject.org/search?lang=en>.
- . 2019. *A Bill Entitled Wildlife Resources Management Act, 2019*.
- Goldstein, Bruce Evan, and William Hale Butler. 2010. "The US Fire Learning Network: Springing a Rigidity Trap through Multiscalar Collaborative Networks." *Ecology and Society* 15(3): 21–34. http://works.bepress.com/bruce_goldstein/19%5Cnhttp://www.
- Guha, Joydeep, and Bhaskar Chakrabarti. 2019. "Achieving the Sustainable Development Goals (SDGs) through Decentralisation and the Role of Local Governments: A Systematic Review." *Commonwealth Journal of Local Governance*: 1–21.
- Hajjar, Reem. 2015. "Advancing Small-Scale Forestry under FLEGT and REDD in Ghana." *Forest Policy and Economics* 58(January 2014): 12–20. <http://dx.doi.org/10.1016/j.forpol.2014.09.014>.
- . 2016. "The Data Not Collected on Community Forestry." *Conservation Biology* 30(6): 1357–62.
- Hajjar, Reem, K.A Kozak, and I.L Innes. 2012. "Is Decentralization Leading to " Real" Decision-Making Power for Forest- Dependent Communities? Case Studies from Mexico and Brazil."

- Ecology and Society* 17(1): 12. <http://www.ecologyandsociety.org/vol17/iss1/art12/ES-2011-4570.pdf> file:///Users/samantha_cheng/Documents/Mendeley Desktop/Hajjar, Kozak, Innes - 2012 - Is Decentralization Leading to Real Decision-Making Power for Forest-dependent Communities Case Studi.
- Hajjar, Reem, and Augusta Molnar. 2016. "Decentralized and Community-Based Approaches." In *Forests, Business and Sustainability*, eds. Rajat Panwar, Robert Kozak, and Eric Hansen. Abigdon: Routledge.
- Hansen, Christian P, Rebecca Rutt, and Emmanuel Acheampong. 2018. "'Experimental' or Business as Usual? Implementing the European Union Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement in Ghana." *Forest Policy and Economics* 96(June): 75–82. <https://doi.org/10.1016/j.forpol.2018.08.012>.
- Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science* 162(3859): 1243–48.
- Johnson, Craig, and Timothy Forsyth. 2002a. "In the Eyes of the State : Negotiating a "' Rights-Based Approach '" to Forest Conservation in Thailand." *World Development* 30(9): 1591–1605.
- . 2002b. "In the Eyes of the State: Negotiating a 'Rights-Based Approach' to Forest Conservation in Thailand." *World Development* 30(9): 1591–1605.
- Kull, Christian A. 2002. "Empowering Pyromaniacs in Madagascar: Ideology and Legitimacy in Community-Based Natural Resource Management." *Development and Change* 33(1): 57–78.
- Kumar, Kundan, Neera M. Singh, and John M. Kerr. 2015. "Decentralisation and Democratic Forest Reforms in India: Moving to a Rights-Based Approach." *Forest Policy and Economics* 51: 1–8. <http://dx.doi.org/10.1016/j.forpol.2014.09.018>.
- Kumar, Sanjay. 1997. "Models and Reality : Case of Forest Communities." *Economic and Political Weekly* 32(51): 3294–96.
- . 2002. "Does 'Participation' in Common Pool Resource Management Help the Poor? A Social Cost-Benefit Analysis of Joint Forest Management in Jharkhand, India." *World Development* 30(5): 763–82.
- Larson, Anne M. 2002. "Natural Resources and Decentralization in Nicaragua: Are Local Governments Up to the Job?" *World Development* 30(1): 17–31.
- Larson, Anne M, and Fernanda Soto. 2008. "Decentralization of Natural Resource Governance Regimes." *Annual Review of Environment and Resources* 33(1): 213–39. <http://www.annualreviews.org/doi/10.1146/annurev.enviro.33.020607.095522>.
- Laverack, Glenn, and Nina Wallerstein. 2001. "Measuring Community Empowerment: A Fresh Look at Organizational Domains." *Health Promotion International* 16(2): 179–85.
- Lele, Sharachandra et al. 2010. "Beyond Exclusion: Alternative Approaches to Biodiversity Conservation in the Developing Tropics." *Current Opinion in Environmental Sustainability* 2(1–2): 94–100. <http://dx.doi.org/10.1016/j.cosust.2010.03.006>.
- Levine, Arielle. 2016. "The Development and Unraveling of Marine Resource Co-Management in the Pemba Channel, Zanzibar: Institutions, Governance, and the Politics of Scale." *Regional Environmental Change* 16(5): 1279–91.
- Lord, J., and P. Hutchison. 1993. "The Process of Empowerment: Implications for Theory and Practice." *Canadian Journal of Community Mental Health* 12(1): 5–22.
- Lund, Jens Friis, Kirsten Carlsen, and Thorsten Treue. 2012. "The Political Economy of Timber

- Governance in Ghana." *European Tropical Forest Research Network* (53): 117–26.
- Magessa, Kajenje, Sophie Wynne-Jones, and Neal Hockley. 2020. "Does Tanzanian Participatory Forest Management Policy Achieve Its Governance Objectives?" *Forest Policy and Economics* 111(December 2019): 102077. <https://doi.org/10.1016/j.forpol.2019.102077>.
- Manor, James. 1999. *The Political Economy of Democratic Decentralization Directions in Development*. Washington DC: The World Bank.
- Marcus, Richard R. 2019. "Where Community-Based Water Resource Management Has Gone Too Far Poverty and Disempowerment in Southern Madagascar Author (s): Richard R . Marcus Published by : Ashoka Trust for Research in Ecology and the Environment and Wolters Stable URL : <https://www.ashoka.org/en/where-community-based-water-resource-management-has-gone-too-far-pov>." 5(2): 202–31.
- Mawutor, S, and D Young. 2017. *District Assembly Use of Timber Royalties in Ghana*. Accra.
- Maxwell, Joseph. 2005. "Methods: What Will You Actually Do?" In *Qualitative Research Design: An Interpretive Approach*, Thousand Oaks CA: Sage Publications.
- McKenry, Patrick C., Julianne M. Serovich, Tina L. Mason, and Katie Mosack. 2006. "Perpetration of Gay and Lesbian Partner Violence: A Disempowerment Perspective." *Journal of Family Violence* 21(4): 233–43.
- Measham, Thomas G., and Jared A. Lumbasi. 2013. "Success Factors for Community-Based Natural Resource Management (CBNRM): Lessons from Kenya and Australia." *Environmental Management* 52(3): 649–59.
- MLNR. 2012. "Ghana Forest and Wildlife Policy-Minstry of Lands and Natural Resources(MLNR)." : 3.
- Moore, John A. 1985. "Science as a Way of Knowing - Human Ecology Opening Remarks." *Integrative and Comparative Biology* 25(2): 377–78.
- Morriss, Peter. 2006. "Steven Lukes on the Concept of Power." *Political Studies Review* 4(2): 124–35.
- Murombedzi, James C. 1999. "Devolution and Stewardship in Zimbabwe's CAMPFIRE Programme." *Journal of International Development* 11(2): 287–93.
- Murphree, Marshall W. 2009. "The Strategic Pillars of Communal Natural Resource Management: Benefit, Empowerment and Conservation." *Biodiversity and Conservation* 18(10): 2551–62.
- Murphree, Michael. 2006. "YANKEY'S DILEMMA." *Annals of the New York Academy of Sciences* 969(1).
- Murray, Grant, Andrew Kyei Agyare, Philip Dearden, and Rick Rollins. 2018. "Devolution, Coordination, and Community-Based Natural Resource Management in Ghana's Community Resource Management Areas." *African Geographical Review* 6812: 1–14. <http://doi.org/10.1080/19376812.2018.1426022>.
- Olatona, John Bamidele, and Philip Akanni Olomola. 2015. "Analysis of Fiscal Decentralization and Public Service Delivery in Nigeria." *Journal of Economics and Sustainable Development* 6(9): 107–20.
- Ostrom, Elinor. 1999. "Self-Governance and Forest Resources." 62(20). <http://www.cifor.org/library/536/self-governance-and-forest-resources/>.
- . 2000. "Collective Action and the Evolution of Social Norms." *The Journal of Economic Perspectives* 14(3): 137–58.
- Oyono, Phil René, Martin Blaise Biyong, and Serge Kombo Samba. 2012. "Beyond the Decade of

- Policy and Community Euphoria: The State of Livelihoods under New Local Rights to Forest in Rural Cameroon." *Conservation and Society* 10(2): 173–81.
- Pagdee, Adcharaporn, Yeon Su Kim, and P. J. Daugherty. 2006. "What Makes Community Forest Management Successful: A Meta-Study from Community Forests throughout the World." *Society and Natural Resources* 19(1): 33–52.
- Parker, Andrew N. 2009. Policy Research Working Paper *Decentralization: The Way Forward for Rural Development?*
<http://documents.worldbank.org/curated/en/282091468766807862/pdf/multi-page.pdf>.
- Perkins, Douglas D., and Marc A. Zimmerman. 1995. "Empowerment Theory, Research, and Application." *American Journal of Community Psychology* 23(5): 569–79.
- Piabuo, Serge Mandiefe, Divine Foundjem-Tita, and Peter A. Minang. 2018a. "Community Forest Governance in Cameroon: A Review." *Ecology and Society* 23(3).
- Piabuo, Serge Mandiefe, Divine Foundjem-Tita, and Peter A. Minang. 2018b. "Community Forestry in Cameroon: Opportunities and Challenges for Sustainable Development Community Forest Governance in Cameroon: A Review." 23(3).
<https://doi.org/10.5751/ES-10330-230334>.
- Quinlan, Margaret M. 2017. "Interpretive Research." *The International Encyclopedia of Communication Research Methods*: 1–2.
- Ramón-Hidalgo, Ana Elia, Robert A. Kozak, H. W. Harshaw, and David B. Tindall. 2018. "Differential Effects of Cognitive and Structural Social Capital on Empowerment in Two Community Ecotourism Projects in Ghana." *Society and Natural Resources* 31(1): 57–73.
- Rappaport, J. 1985. "The Power of Empowerment Language." *Social policy*. 16(2): 15.
- Rathbone, Richard. 2000. "Kwame Nkrumah and the Chiefs : The Fate of ' Natural Rulers ' under Nationalist Governments Author (s): Source : T , Vol . 10 (2000), Pp . 45-63 Published by : Cambridge University Press on B." *Transactions of the Royal Historical Society* 10(2000): 45–63.
- Ribot, Jesse C. 2002a. "African Decentralization: Local Actors, Powers and Accountability." *International Development Research Centre*: 103.
<http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:African+Decentralization:+Local+Actors,+Powers+and+Accountability#4>.
- . 2002b. *77 Forestry Democratic Decentralisation of Natural Resources: Institutionalising Popular Participation*. Washington DC: World Resources Institute.
- Ribot, Jesse C., Arun Agrawal, and Anne M Larson. 2006. "Recentralizing While Decentralizing: How National Governments Reappropriate Forest Resources." *World Development* 34(11): 1864–86.
- Ribot, Jesse C., and Nancy Lee Peluso. 2009. "A Theory of Access*." *Rural Sociology* 68(2): 153–81.
- Richards, Lyn, and Janice M Morse. 2013. "Readme First for a User's Guide to Qualitative Methods."
- Rights and Resources Initiative. 2014. *What Future for Reform? Progress and Slowdown in Forest Tenure Reform since 2002*. Washington DC.
- Robinson, Lance W., and Kwame Ampadu Sasu. 2013. "The Role of Values in a Community-Based Conservation Initiative in Northern Ghana." *Environmental Values* 22(5): 647–64.
- Roe, Dilys. 2008. "The Origins and Evolution of the Conservation-Poverty Debate: A Review of

- Key Literature, Events and Policy Processes." *Oryx* 42(4): 491–503.
- Rowlands, Jo. 1996. "Empowerment Examined." In *Development and Social Diversity: A Development in Practice Reader*, ed. Deborah Eade. Oxford: Oxfam, 86-.
- De Royer, S., M. Van Noordwijk, and J.M. Roshetko. 2018. "Does Community-Based Forest Management in Indonesia Devolve Social Justice or Social Costs?" *International Forestry Review* 20(2): 167–80.
- Sasu, Opon. 2005. *The Politics of Decentralization : Forests, Power, and People*. eds. Carol J Pierce Colfer and Doris Capistrano. London: London.
- Scheyvens, Regina. 1999. "Ecotourism and the Empowerment of Local Communities." *Tourism Management* 20: 245–249.
- Schlager, Edella, and Elinor Ostrom. 1992. "Property-Rights Regimes and Natural Resources : A Conceptual Analysis." *Land Economics* 68(3): 249–62.
<http://www.jstor.org/stable/3146375>.
- Schneider, Aaron. 2003. "Decentralization: Conceptualization and Measurement." *Studies in Comparative International Development* 38(3): 32–56.
- Schusser, Carsten et al. 2014. "Comparing Community Forestry Actors in Cameroon, Indonesia, Namibia, Nepal and Germany." *Forest Policy and Economics* 68: 81–87.
<http://dx.doi.org/10.1016/j.forpol.2016.03.001>.
- Shackleton, Sheona, Bruce Campbell, Eva Wollenberg, and David Edmunds. 2002. "Devolution and Community-Based Natural Resource Management: Creating Space for Local People to Participate and Benefit?" *Natural Resource Perspectives* 76(76): 1–6.
- Storey, David. 1999. "Issues of Integration, Participation and Empowerment in Rural Development: The Case of LEADER in the Republic of Ireland." *Journal of Rural Studies* 15(3): 307–15.
- Suich, Helen. 2013. "Evaluating the Household Level Outcomes of Community Based Natural Resource Management: The Tchuma Tchato Project and Kwandu Conservancy." *Ecology and Society* 18(4).
- Teye, Joseph. 2011. "Ambiguities of Forest Management Decentralization in Ghana." *Journal of Natural Resources Policy Research* 3: 355–69.
- Theodori, Gene L. 2005. "Community and Community Development in Resource-Based Areas: Operational Definitions Rooted in an Interactional Perspective." *Society and Natural Resources* 18(7): 661–69.
- Tsikata, Fui S. 1997. "The Vicissitudes of Mineral Policy in Ghana A Summary of Post-Independence Constitutional History." *Resources Policy* 23(1): 9–14. https://0-ac-els--cdn-com.wam.leeds.ac.uk/S0301420797000068/1-s2.0-S0301420797000068-main.pdf?_tid=68a73d8c-1734-47f7-b3d9-dea69ccf30e2&acdnat=1541595594_35bcd07ebad157b3fe0474a626a2aff6.
- Vakil, Anna C. 1997. "Confronting the Classification Problem: Toward a Taxonomy of NGOs." *World Development* 25(12): 2057–70.
- Vedeld, Trond. 2000. "Village Politics: Heterogeneity, Leadership and Collective Action." *The Journal of Development Studies* 36(5): 105–34.
<http://www.ncbi.nlm.nih.gov/pubmed/11437969>
<http://libaccess.mcmaster.ca/login?url=http://search.proquest.com/docview/964181592?accountid=12347>
<https://www.scopus.com/inward/record.uri?eid=2-s2.0->

84867444475&partnerID=40&md5=0743b4db1d3bdd6ced1438259c.

- Wright, Juliet H. et al. 2016. "Reframing the Concept of Alternative Livelihoods." *Conservation Biology* 30(1): 7–13.
- Yeboah-Assiamah, Emmanuel. 2016. "Power to the People! How Far Has the Power Gone to the People? A Qualitative Assessment of Decentralization Practice in Ghana." *Journal of Asian and African Studies* 51(6): 683–99.
- Yeboah-Assiamah, Emmanuel, Kobus Muller, and Kwame Ameyaw Domfeh. 2018. "'Complex Crisis' and the Rise of Collaborative Natural Resource Governance: Institutional Trajectory of a Wildlife Governance Experience in Ghana." *Environment, Development and Sustainability* 20(5): 2205–24.
- Yin, Robert K. 2003. *Applications of Case Study Research*. 2nd ed. Thousand Oaks: Thousand Oaks : Sage Publications.
- Zulu, Leo Charles. 2008. "Community Forest Management in Southern Malawi: Solution or Part of the Problem?" *Society and Natural Resources* 21(8): 687–703.

Appendix A: Research Participants

National level individual interviews	<ul style="list-style-type: none"> • 4 National NGOs • 2 International NGOs • 2 Forestry Commission Officials
District level individual interviews	<ul style="list-style-type: none"> • 2 Wildlife Park Managers • 2 District Forest Managers • 1 CREMA facilitator

Community level						
	Amokwaw CREMA	n	Aowin CREMA	n	Krokosua Hills	n
Focus groups	<ul style="list-style-type: none"> • 1 CEC • 3 CRMCS • 2 Men in CREMA • 3 women's in CREMA 	6 21 12 18	<ul style="list-style-type: none"> • 3 CRMC • 3 Men in CREMA • 3 Women in CREMA • 3 Non-CREMA 	15 20 14 17	<ul style="list-style-type: none"> • 1 CEC • 4 CRMC* • 3 Men in CREMA • 3 Women in CREMA 	7 18 23 21
N		57		66		69

Individual interviews		
	<ul style="list-style-type: none"> • 2 former CEC members • 1 Assemblyman • 1 Family head 	<ul style="list-style-type: none"> • 1 District Assembly rep • 1 CEC member • 1 logging company rep • 1 farmer
		<ul style="list-style-type: none"> • 1 local chief • 1 former CEC member • 2 wildlife officers

Farm visits		
	<ul style="list-style-type: none"> • 2 farms visits 	<ul style="list-style-type: none"> • 2 farm visits
		<ul style="list-style-type: none"> • 2 farm visits • Visit to community enterprise.

Observations
<ul style="list-style-type: none"> • 1 CEC Meeting • 2 National CREMA policy meetings

Appendix B: Interview Guide for focus group discussions

1. Can you kindly introduce yourselves? What do you do? How long have you been in this community? How long have you been engaged in your occupation?
2. What types do you have in your community?
 - a. How important are these resources to you?
3. Can you explain to me what the CREMA is?
4. How did you/community decide to be part of the CREMA?
5. Why are you or are you not a member of the CREMA?
6. How did the CREMA start here?
7. What is the work of the CREMA?
8. How were the Constitution and the CREMA by-Law created? Who did we get involved in that process?
9. When CREMAS are created, I'm sure the authorities mentioned the have given you power. What powers do we have now as a CREMA community?
10. I understand at a point the CREMA became dormant. What accounted for that?
11. What are you able to do now as a CREMA community that you were not able to do before?
12. How does accountability work in the CREMA?
 - a. How often do you meet at the community level or the larger CEC level?
 - b. How do you make decisions in the CREMA?
13. What rights do you have now that you didn't have before the CREMA? How do you exercise that right?
14. How do we as CREMA relate to the following people in the past and presently?
 - a. other CREMA communities?
 - b. The District Assembly?
 - c. The Traditional Authorities?
 - d. Logging companies
15. What benefits have you had from the CREMA since it started here?
16. What social benefits do you see from the CREMA?
 - a. What changes have you seen in the community since the CREMA was established?
 - b. How do you feel about the benefits (individually and collectively) from the CREMA?
 - c. How do members of the community relate to one another in relation to the CREMA?
17. Explain to me how the community has benefited economically from the CREMA What income, job or enterprise opportunities have CREMAS created for the community and for who?
 - a. What skills and capacities have the community members acquired through the CREMAS?
 - b. Explain to me how the community has benefited economically from the CREMA.
 - c. How have CREMAS improved access to resources and to markets?
18. What do you like about our CREMA and how does that make you feel?
 - a. How do you feel about the benefits (individually and collectively) from the CREMA?
 - b. How has your value for forests changed since you started this CREMA?
19. Have there been any changes in how work together with the other CREMA community?
20. What other development interventions have taken place in the community?

- a. How are these interventions related to or different from the CREMAs?
- 21. What problems do you have with your forest/CREMA?
 - a. How have you tried to solve the problem?
 - b. What is about our CREMA that we don't like
- 22. If we had to chance to improve anything about our CREMA, what will we want to do differently?
 - a. What does the CREMA need to be able work for the community the way you want it to?

Appendix C: Interview Guide for District level participants

1. Can you please introduce yourself?
2. Explain to me how you have been involved with this CREMA in the past (as long as you can remember) and presently?
3. In your understanding, what is CREMA and what does it do?
4. Can you tell me how the CREMA in this district was established?
5. In your experience, what powers do CREMAs have?
 - a. What can they do or not do?
 - b. How are they different from other communities?
6. What rights do you have now that you didn't have before the CREMA? How do you exercise that right?
7. How do you relate with the CREMA?
8. What social benefits do you see from the CREMA?
 - a. How do the CREMA communities relate among themselves?
 - b. Has the community received or build their own social amenities since the CREMA was established?
- a. Explain to me, if it exists, how the communities have benefited economically from the CREMA.
 - b. What income, job or enterprise opportunities have CREMAs created for the community and for who?
 - c. What skills and capacities have the community members acquired through the CREMAs?
 - d. How have CREMAs improved access to resources and to markets?
9. What changes have you see with any of the CREMA communities?
10. What has changed with them since the CREMA was established?
11. What problems has the CREMA created for the communities?
12. What needs to be done differently, so the CREMAs communities can have much more positive impact of communities.

Appendix D: Interview Guide for National level participants

1. Can you kindly introduce yourself?
2. How you have been involved with CREMAs over the past years?
3. Can you tell me about the problems that CREMAs were designed to address?
 - a. How have the motivations for establishing CREMAs changed, if any, over time?
4. Can you explain to me the process for creating a CREMA? Which institutions and individuals at either national or local levels are involved in the creation of CREMA?
5. Can you explain why these institutions and groups support the creation of CREMAs?
6. When CREMAs are established, what devolved powers do they have?
 - a. What can do with that power?
 - b. In practice how does this use of power play out? exercise these powers?
7. From your experience, do you know of any occasions when CREMAs were able to take collective action?
 - a. What examples of collective action are CREMAs able to take?
 - b. How are CREMAs able to influence forest decision making at the local and district levels?
8. Can you explain to me how CREMAs contribute to social development in the communities?
9. Can you explain to me how CREMAs have improved the community values and sense of being?
10. From your experience, what economic opportunities does CREMAs provide for communities?
 - a. Which occupational or social groups benefit from these opportunities?
11. In your view what are the most important impacts CREMAs have had on the communities?
 - a. How did those impacts come about?
12. What in your view is lacking with the current CREMA arrangements?
 - a. Can those the gabs be addressed?

Appendix E: Consent statement: Focus groups

This consent statement was read and translated to research participants before commencing any focus group discussion.

My name is Samuel Mawutor, and I am studying for a Masters at Oregon State University. I am conducting a research titled FOREST DECENTRALIZATION IN GHANA: EXAMINING EMPOWERMENT OF LOCAL INSTITUTIONS for my thesis. This study seeks to examine the extent to which forest decentralization happens with CREMAs and how that relates to community empowerment.

I am coming to you because of your involvement with CREMAs and your representation of an essential perspective in this research. If you consent, I will want to discuss with you several issues related to CREMAs and your role. This interview should last for about 1hour (**3 hours**), and if you are interested, we may extend the conversation or schedule another meeting. If you need to shorten the discussion for any reason, I will be happy to work with that too.

Before anything, I would like to bring these points to your attention to get your approval before we can start the interview.

- Your participation in this research is your free choice. For any reason can choose to exempt yourself, choose not to answer a question, or withdraw from the interview at any point in time. In any of these cases, there is no cost whatsoever to you.
- Your response, should you participate in this research, will not have any relation with CREMA.
- There is no monetary compensation for participating in this interview. It is completely voluntary.
- What we discuss is confidential, and I will not share any information that identifies you in the final works I produce. If you also consent now, I will save this interview for up to 5 years, for future dissertation research, I will do to ensure I do not come back to discuss these same issues with you.
- To be able to capture the discussion accurately, I would like to record this, with your consent. This recording will also be kept confidential and will not trace back to you.
- You will not be identified in the writing of the research, and identifying information will not be shared with anyone and will not be distributed for future research studies.
- ***Everything we discuss in this focus group is confidential, and I will strongly urge everyone to be cautious with using the information from this meeting. You may choose not to share information that will put you at risk, or you may want to talk to me separately after this focus group discussion.***

From what we discuss, I will be able to make recommendations about how CREMAs can be well supported or set up better in the future to have a stronger impact on local communities such as yours. You will not benefit directly from this study.

If at any point need clarification on any issue, you may reach, me on 0246852432 or Samuel.mawutor@oregonstate.edu, or Dr. Reem Hajjar, my supervisor and the principal investigator of this study, on +1.541.737.5046 or reem.hajjar@oregonstate.edu. Also, as a research participant, you may raise any issue regarding your rights or welfare with the Oregon State University Human Research Protection Program on +1.541.737.8008 or by email at IRB@oregonstate.edu.

Should you have any concerns with this research, also you may raise them with the Chief and his elders and or with Mr. Albert Katako of Civic Response, a National Non-Governmental Organization (NGO) based in Accra on 0302-521905.

If you have any questions related to any of the points I have raised or with this interview, you may ask for me to clarify and any point in time. So that I'm sure you understand what the study involves, could you tell me what you think this interview is about? Do you see any general risks or risks to your personal or working relationships from participating? Do I have your consent to move forward with the interview? Do I have your permission to audio record this interview?

Appendix F: Verbal consent statement: Individual interviews

My name is Samuel Mawutor, and I am studying for a Masters at Oregon State University. I am conducting a research titled FOREST DECENTRALIZATION IN GHANA: EXAMINING EMPOWERMENT OF LOCAL INSTITUTIONS for my thesis. This study seeks to examine the extent to which forest decentralization happens with CREMAs and how that relates to community empowerment.

I am coming to you because of your involvement with CREMAs and your representation of an essential perspective in this research. If you consent, I will want to discuss with you several issues related to CREMAs and your role. This interview should last for about 1hour and if you are interested, we may extend the conversation or schedule another meeting. If you need to shorten the discussion for any reason, I will be happy to work with that too.

Before anything, I would like to bring these points to your attention to get your approval before we can start the interview.

- Your participation in this research is your free choice. For any reason can choose to exempt yourself, choose not to answer a question, or withdraw from the interview at any point in time. In any of these cases, there is no cost whatsoever to you.
- Your response, should you participate in this research, will not have any relation with CREMA.
- There is no monetary compensation for participating in this interview. It is completely voluntary.
- What we discuss is confidential, and I will not share any information that identifies you in the final works I produce. If you also consent now, I will save this interview for up to 5 years, for future dissertation research, I will do to ensure I do not come back to discuss these same issues with you.
- To be able to capture the discussion accurately, I would like to record this, with your consent. This recording will also be kept confidential and will not trace back to you.
- You will not be identified in the writing of the research, and identifying information will not be shared with anyone and will not be distributed for future research studies.

From what we discuss, I will be able to make recommendations about how CREMAs can be well supported or set up better in the future to have a stronger impact on local communities such as yours. You will not benefit directly from this study.

If at any point need clarification on any issue, you may reach, me on 0246852432 or Samuel.mawutor@oregonstate.edu, or Dr. Reem Hajjar, my supervisor and the principal investigator of this study, on +1.541.737.5046 or reem.hajjar@oregonstate.edu. Also, as a research participant, you may raise any issue regarding your rights or welfare with the Oregon State University Human Research Protection Program on +1.541.737.8008 or by email at IRB@oregonstate.edu.

Should you have any concerns with this research, also you may raise them with Mr. Albert Katako of Civic Response, a National Non-Governmental Organization (NGO) based in Accra on 0302-521905.

If you have any questions related to any of the points I have raised or with this interview, you may ask for me to clarify and any point in time. So that I'm sure you understand what the study involves, could you tell me what you think this interview is about? Do you see any general risks or risks to your personal or working relationships from participating? Do I have your consent to move forward with the interview? Do I have your permission to audio record this interview?

Appendix F: Chapter two codebook

What powers in law?

Parent nodes	Child nodes	Description
Powers of the CREMA		Explains the types of powers and rights the CREMA is designed to have in bylaws and in CREMA Constitutions.
Enforce compliance		Suggestions that it is the power and responsibility of the CREMA to ensure compliance with all national environmental laws locally
	Arrest and sanction violators	Suggestions that the CREMA has the authority to arrest offenders, impose fines, or confiscate seized products.
Make decisions		Suggestions that the CREMA can make decisions by themselves
	Managing wildlife and NTFPs	Suggestions CREMA imposes fees, embargo access to resources,
	Elect leaders	Suggestions about what leaders to select and their terms of office
	Planning	Suggestions that CREMAs can plan their actions, activities and raise funds using their own means.
	Regulate access to the forest	Suggestions the CREMAs determine who gets entry to the forest and also define the terms of entry.
Make rules		That CREMAs define rules about resource use
	Set access rules	Suggestions that CREMAs determine the conditions and rules for accessing resources
	Election rules	Suggestions about the process for electing leaders (CREMC & CEC) and the responsibilities of leaders,
Settle disputes	Dispute resolution	Suggestions about how to deal with conflicts and disputes.

Stakeholder perspectives of power

Parent nodes	Child nodes	Description
Power the CREMA has		The power and authority the CREMA in the understanding of research participants
Make decisions		Suggestions that CREMAs make some kinds of decisions about their resource in their communities.
	Manage the forest resources	Suggestions that the CREMA manages resources (water, forests and wildlife) in the area
	Allocate hunting quotas	Suggestions that the CREMA gives hunting permits to hunters
	Manage trees on the farm	Suggestions that the CREMA/CEC can grant permission for felling trees on the farms of community members
	Skepticism	Communities are skeptical about CREMA initially but accepted the CREMA
	Set areas apart	Suggestions the CREMA creates sacred sites for conservation
No power	No power or very limited power	Suggestions that the CREMA has no power at all

Enforce laws		Suggestions that CREMA members responsibly and power is shown in how they enforce forest laws locally
	Protect from intruders	Suggestions that CREMA members guard and patrol the CREMA and prevent intruders from entering
	Arrest offenders & intruders	Suggestions that the CREMA arrests those intruding into the forest and those destroying resources (harmful fishing or setting fires)
	Report offenders	Report intruders to be arrested
	Exclude others	Suggestions that members exclude others from their property
	Educate the community and outsiders	Suggestions that members of the CREMA educate their communities or intruders
	Mount roadside checks	Suggestions that the CREMA can mount roadside checks to inspect vehicles leaving their communities
	Regulate hunting	Suggestions that CREMA report animal citing's to allocate bushmeat hunting quotas
	Sanctions offenders	Suggestions that the CREMA can impose fines and sanctions on CREMA offenders
Make laws	Make laws	Suggestion that CREMAs set rules about how to access the forest

Challenges of CREMAs

Parent nodes	Child nodes	Description
Challenges		Challenges facing the CREMAs, some of which are as a result of the creation of the CREMA, some of which are emerging challenges to the functions.
Inadequate or faulty economic support for CREMA to make them functional		Suggestions that how CREMAs are setup create problems for their financial/economic survivability and limits their potential for economic impacts.
	No tree tenure rights	Suggestion that CREMA communities have no rights over naturally-occurring trees on our farms
	No jobs	Suggestion that the CREMA has not generated employment opportunities
	No funding for the CREMA	Suggestion that there is no tourism revenue coming to the CREMA or revenue from a CREMA enterprise
	Support for the CREMA run out	Suggestions that there was no support for the CREMA after CREMA implementers left the community
	No utilization of forest	Suggestions that the CREMA resources do not generate income for the CREMA
	Admin overheads	Suggestions that there is no money to pay for utility and other administration cost
	Failed livelihood schemes	Suggestions explaining the failure of alternative livelihood schemes
Poor sense of ownership of CREMA		A sense that the CREMA is overly dependent on outsiders and not on the priority for local people
	Cost of running the CREMA	Suggestion that the CREMA does not have the ability to cover transportation, allowances and cec/crmc meeting costs
	No id cards no power	Suggestions that since members were not given identity cards, they didn't have the power and were unable to assert their authority

	Community is not assertive	Suggestions that tradition prevents local people from expressing themselves
	Powerful social elites	Suggestions that social elites use their influence to their advantage, leaving members feeling cheated
Inadequate external support		
	Disappointment in governance institutions	Suggestions that national institutions and politicians have not been supportive of the CREMA and the communities
	Fc/wd ineffectiveness	Suggestions that the Forestry Commission enforcement of laws is weak and not a deterrent to law breakers
Governance challenges		The governance of the CREMA does not help to improve expected outcomes of CREMAs
	Leadership challenges	Suggestion that changing leaders of the CREMA is difficult
	Ineffective accountability	Suggestion that accountability in the CREMA is weak
	Management challenges	Suggestions that bad management of CREMA funds, challenges with leadership, and inability to change leadership of the CREMA are problems
Political challenges		Challenges that limit the ability of CREMAs to assert themselves
	Safety of CREMA members	All threats, abuses and intimidation to the security and safety of CREMA members in the course of their work.
	Restricted access to forest	Suggestions that community members are denied their rights to enter/access the forest
	Deference - lacking assertiveness and inability to make demands	Communities lack the ability to assert their rights, the ability to assert power, and too much respect for outsiders, no id card to enforce rights.
	Weak legal framing of CREMAs	Suggestions that the legal basis of CREMAs in laws is weak and narrow in focus

Appendix G: Chapter three Codebook.

Code book for Empowerment

Parent nodes	Child nodes	Description
Economic empowerment		Any economic benefit in any form for the CREMA intervention
	Alternative livelihood activity	Skills or enterprise to make money to depend less on the forest
	Employment	Opportunities for CREMA or community members to gain employed
	Harvesting more cocoa	CREMA has been taught new farming practices that improves crop productivity.
	Income from an activity	The CREMA was direct income from an activity - fund
Political empowerment		Any political impacts from the CREMA - broad code.
	Awareness of rights	An awareness of rights and the ability to assert the rights over their area
	Exclude others	The right of the CREMA members to exclude others from their property
	Property rights for planted trees	By planting trees CREMA members realized that they have acquired property rights over the trees
Potential benefits		Any benefit that has been promised to the community
Psychological empowerment		Impacts from the CREMA expressed as feelings
	Feel important	CREMA recognizes a community or an individual that makes them feel important.
	Pride of culture	CREMA provided an opportunity to take pride in our culture.
Social empowerment		Social impacts of the CREMA
	Ecosystem services	All the environmental services provided by the CREMA
	Learning	Knowledge acquired by CREMA members through awareness raising events, meetings, training etc.
	Conservation learning	Learning focused on protecting forests /improving their farm practices /forest/landscape
	Learning for rights	Learning to know their rights as community people
	Social amenities	Any social amenities/infrastructure provided through or because of the CREMA to meet social needs.
	Improved inter-community relations	Interrelations among the communities improved and communities had stronger bonds because of the CREMA
	No benefit	Not benefiting in any way from the CREMA for any or many reasons. From no benefit or the benefit is gone

Code book for disempowerment

Parent nodes	Child nodes	Description
Challenges & disempowerment		Challenges facing the CREMAs, some of which are as a result of the creation of the CREMA, some of which are emerging challenges to the functions.
Economic disempowerment		
	No tree tenure rights	Suggestions that of control over trees on our farms
	No jobs	Suggestion that CREMA has not brought employment opportunities.
	Inadequate investment	The level of financial investment in CREMA is inadequate to create wealth,
	No income to the CREMA	Suggestions that there is no funding coming to the CREMA to sustain it or fund meetings, or burdens of financing CREMA or absence of forest enterprise, or no tourism income
	Failed alternative livelihoods	Suggestions that alternative lively hoods failed and why they failed. Inability to manage the additional livelihood projects
Political Disempowerment		
	Powerful social elites	Suggestion that social elites using their usurping the work and powered of the CREMA
	Community is not assertive	Suggestion that community traditions Tradition prevents people from expressing themselves, asserting themselves or beholding to external organizations
	Accountability	Suggestions of poor accountability in the CREMA
	Safety of CREMA members	Suggestions of threats, abuses and intimidation to the security and safety of CREMA members in the course of their work.
	Restricted access to forest	Suggestions that locals are denied their rights to enter/access the Forest Reserve
	Dependence/no ownership	Suggestions of allowances for attending CREMA (cec) meetings, no allowances no meeting – dependence, CREMA is not independent enough to take up management.
Social disempowerment		
	Powerful social elites	Suggestions of community elites usurping the work and power of the CREMA,
	Unequal benefits	Suggestions that some CREMA members have more power and access than other members